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WESTERN AUSTRALIA.

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# REPORT

*of the*

# PUBLIC HEALTH DEPARTMENT

*for the*

## Years 1937 and 1938

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# Report of the Public Health Department.

*The Hon. Minister for Public Health.*

I have the honour to submit herewith the Report of the Public Health Department for the two years 1937 and 1938.

## FINANCIAL.

### STATEMENT OF REVENUE AND EXPENDITURE.

#### *Revenue.*

		Calendar Year.			Calendar Year.					
		1937.	£	s.	d.	1938.	£	s.	d.	
License Fees	...	140	14	6		170	4	11		
Meat Inspection Fees	...	5,374	17	1		5,319	15	9		
“ Village Area ” Sanitary Contracts	...	119	10	9		113	3	5		
Pathological Laboratory	...	428	17	9		403	3	6		
Sanitation Refunds	...	147	6	10		138	17	8		
Inspection of Plans (Septic Tanks)	...	449	15	0		479	5	0		
Miscellaneous	...	193	14	3		214	10	4		
Nurses’ and Midwives’ Registration and Examination Fees	...	215	1	6		332	10	6		
Diphtheria Immunisation Recoups	...	310	6	11		104	9	8		
			£7,380	4	7		£7,276	0	9	

#### *Expenditure.*

		£	s.	d.	£	s.	d.
Salaries	...	14,498	3	9	14,152	10	10
“ Village Area ” Sanitation	...	107	0	5	62	8	0
Payment, Local Health Authorities	...	3,160	0	5	4,204	18	11
School Hygiene	...	356	10	11	239	5	8
Travelling and Transport	...	403	5	8	432	12	5
Postage and Telephones	...	299	0	0	317	1	10
Laboratory	...	146	11	11	319	18	11
Venereal Diseases	...	2,763	5	3	2,745	0	7
Miscellaneous	...	758	15	7	1,032	15	9
Infant Welfare Centres	...	2,684	7	0	2,779	10	2
Maintenance and Transport of Lepers	...	4,022	11	2	3,897	12	11
Medical Officer and School Dentist—Travelling Allowances	...	579	2	10	623	10	5
Diphtheria Immunisation	...	835	10	11	341	15	8
Respirators	...	...	...	...	704	11	10
Total, Public Health	...	£30,614	5	10	£31,853	13	11

#### Sanitation of Government Buildings—

Sanitary Charges	...	9,119	6	4	9,585	10	6
Total, Government Sanitation	...	£9,119	6	4	£9,585	10	6
Total, Public Health Branch	...	£39,733	12	2	£41,439	4	5

## VITAL STATISTICS.

Western Australia.

			1936.	1937.	1938.
Mean Population—					
Males ...	...	...	238,246	240,026	242,571
Females ...	...	...	211,790	214,269	217,406
	Total	...	450,036	454,295	459,977
Births—					
Males ...	...	...	4,287	4,416	4,675
Females ...	...	...	4,192	4,193	4,466
	Total	...	8,479	8,609	9,141
Birth Rate—					
Per thousand of mean	...	...	18.84	18.95	19.87
Deaths—					
Males ...	...	...	2,611	2,498	2,646
Females ...	...	...	1,619	1,567	1,588
	Total	...	4,230	4,065	4,234
Death Rate—					
Per thousand of population	...	...	9.40	8.95	9.20
Natural Increases—					
Rate per thousand of mean population	...	...	9.44	10.00	10.67
*Infantile Mortality per thousand Births—					
Metropolitan Area	...	...	44.21	42.40	29.76
Rest of State	...	...	40.81	33.96	36.76
Whole State	...	...	42.22	37.52	33.80
Still Births—					
Metropolitan Area	...	...	...	103	103
Whole State	...	...	...	241	224

\*Excluding Still Births.

## BIRTH, DEATH, AND INFANTILE MORTALITY RATES AND NUMBER OF STILL BIRTHS, 1929-1938.

	Birth Rate.	Death Rate.	Infantile Mortality.*			Still Births.			
			Whole State.	Metropolitan Area.	Rest of State.	Whole State.	Metropolitan Area.		
1929	...	...	21.51	9.34	56.1	65.4	48.4	265	136
1930	...	...	21.44	8.8	46.7	51.9	47.2	256	137
1931	...	...	19.77	8.51	41.5	46.2	37.8	228	112
1932	...	...	18.31	8.54	44.6	47.5	42.3	210	104
1933	...	...	17.95	8.64	36.8	35.2	38.1	231	120
1934	...	...	17.66	9.23	40.9	41.3	40.6	228	129
1935	...	...	18.23	9.25	40.2	40.1	40.2	258	132
1936	...	...	18.84	9.40	42.2	44.2	40.81	251	118
1937	...	...	18.95	8.05	37.2	42.40	33.96	241	103
1938	...	...	19.87	9.20	33.80	39.76	36.76	224	103

\*Exclusive of Still Births.

## COMPARISON OF INFANT MORTALITY AND GENERAL DEATH RATE.

	Infant Mortality.			General Death Rate.		
	1936.	1937.	1938.	1936.	1937.	1938.
New Zealand ...	30.96	31.21	35.63	8.75	9.08	9.71
Western Australia ...	42.22	37.52	33.80	9.4	8.95	9.20
New South Wales ...	43.47	40.68	41.84	9.14	9.36	9.59
Victoria ...	42.31	36.7	34.21	10.16	10.03	10.15
Queensland ...	36.2	35.64	41.28	8.78	9.10	9.19
Tasmania ...	49.55	41.7	39.7	10.34	9.51	9.71
South Australia ...	31.09	33.05	30.5	9.3	8.91	9.35

### General Death Rate.

Reference to the tables will show that where New Zealand has generally held pride of place in Australia as regards the general death rate, it has been beaten in 1937 by both Western Australia and South Australia and in 1938 by both Western Australia and Queensland. In the latter year Queensland has only just snatched victory from Western Australia by .01 per thousand of the population. The Western Australian figure is less than that of 1936 but slightly higher than that of 1937.

### Infantile Mortality.

The infant mortality represents the deaths of infants under one year of age per thousand born and in this regard Western Australia has shown its two record years during the period under review. During 1938 it has gone so far as to beat New Zealand, but runs second only to South Australia which during that year held pride of place. It is pleasing to know, however, that we have reached a figure never previously attained in this State.

### Birth Rate.

The birth rate has shown a distinct rise to a figure appreciably higher than that attained for some years.

## INFECTIOUS DISEASES.

### Typhoid Fever.

The number of cases of this disease notified in 1937 was 51 and in 1938, 37 as against 99 in 1935 and 62 in 1936. The figure for 1938 is probably the lowest ever recorded in the State and speaks well for the results of improved sanitation. Only ten years ago there were 113 cases, a figure far below any previously recorded at that time. The cases for the most part occurred in the metropolitan area and nothing in the nature of an epidemic occurred anywhere in the State during the two years being reviewed. The deaths recorded from this disease were, respectively, 8 and 5 for the years 1937 and 1938.

### Diphtheria.

Of this disease 1,166 cases were recorded in 1937 and 921 in 1938. The figures for the two previous years were 1,308 in 1935 and 792 in 1936. It is to be noted that carriers of the Diphtheria Bacillus are notified as cases. During 1937 and 1938 a considerable amount of immunisation was carried out in both town and country and it will not be far wide of the mark to say that at least 35,000 children have now been given protective inoculations in the State. It is hoped that this number will be very much increased during 1939, though a considerable amount of parental apathy still exists which, in the case of a disease which may strike so suddenly and with such dire results, is not understandable. It seems that there are still many who prefer to be guided by the statements of unqualified opponents of immunisation rather than accept the advice of those qualified to speak and judge. These same persons would not ask a bricklayer to do plumbing work for them, nor engage the butcher to bake their bread, yet for advice regarding the protection of their dearest possessions, their children, they will believe the most ignorant, extravagant and unscienc-

tific statements, instead of relying upon those trained and qualified to advise them. The table below indicates prevalence during the past five years.

—	1934.	1935.	1936.	1937.	1938.
Cases notified ... ...	974	1,308	792	1,166	921
Deaths ... ...	36	35	36	39	41
Per cent. of total deaths	0.88	0.85	0.85	.96	.97

The districts most affected during the years under review were the following:—

	1937.	1938.
Metropolitan Area ... ...	890	691
Boulder ... ...	33	39
Harvey ... ...	23	7
Kalgoorlie ... ...	74	24
Katanning ... ...	37	5
Geraldton ... ...	5	36

### Diarrhoea and Enteritis (under one year).

Deaths only of Infantile Diarrhoea are available as an index of prevalence, the disease not being notifiable to the health authorities. During the year 1937 this disease accounted for 45 deaths and 61 in 1938, as against 39 in 1935 and 23 in 1936. These figures are the highest for any year since 1930. The figures are disappointing for the reason that 1936 had shown a lower figure than had previously been recorded.

### Scarlet Fever.

During 1937 there were 627 cases of Scarlet Fever brought to the notice of the Department and in 1938, 551. These figures are both greatly in excess of the two previous years and only go to confirm the fact of a cyclical incidence of this disease which tends to show, alternately, periods of low and high incidence. The death rate was, as usual in Australia, low by comparison with Europe and America.

### Measles.

This disease not being notifiable to health authorities, prevalence and severity can only be gauged by mortality resulting from complications, particularly pneumonia. There were no deaths referable to this disease either in 1937 or 1938 as compared with 18 in 1935 and one in 1936.

### Whooping Cough.

As in the case of measles this disease also is not notifiable and the index of prevalence and severity is the mortality figure. There were 8 deaths in 1937 and one in 1938 as against 4 and 51, respectively, in 1935 and 1936.

### Infantile Paralysis (Acute Anterior Poliomyelitis).

About the middle of 1937 a very severe outbreak of Infantile Paralysis made its appearance in Victoria and rapidly developed into an epidemic hitherto unparalleled in Australia. From Victoria the disease spread to Tasmania, New South Wales, South Australia, and Queensland, and finally to Western Australia if the fact of a considerably larger number of cases than usual can be definitely regarded as an extension of the Eastern States epidemic.

Until December, that is some six months after the disease made its appearance in Victoria, incidence in Western Australia was not unusual, but on

Christmas Eve, 1937, a case occurred with extensive paralysis of the respiratory muscles which simulated the type so prevalent in the East as to suggest that the epidemic was approaching.

Prior to its occurrence the State had purchased and installed only one day previously a respirator (iron lung) which had immediately to be put into commission. Up to this time there had been only the normal number of cases during the year, but this case was the forerunner of some 48 cases which occurred between that date and May, 1938, when the cases ceased suddenly with the onset of colder and wet weather. Towards the end of 1937 when the position appeared extremely serious in the Eastern States the Minister for Health appointed an Advisory Committee of Medical Specialists to advise on measures to be taken and to share with the Commissioner of Public Health responsibility for their enforcement.

So soon as it became apparent that Victoria was to become a menace to other States the Minister, on the advice of this committee, proclaimed the disease, Poliomyelitis, a Dangerous Infectious Disease and made an order that all children under the age of sixteen years entering Western Australia from Victoria should remain in isolation in their homes for three weeks subsequent to arrival here from the date of departure from Victoria. When the disease spread from Victoria to other States the order was amended to include children from those States also. Enforcement of this provision involved the meeting and instruction of all arrivals at four main points of entry, namely, Fremantle and Albany by ship, Kalgoorlie by train, and Kalgoorlie and Perth by air. This work was carried out by officers of the central Department and local health authorities, the latter being also responsible for surveillance of those quarantined in their homes.

Two prosecutions only were taken against persons defying the order, and local authority officers are to be commended for the thoroughness with which the work was carried out.

The ultimate result of only 48 cases in this State, a figure much lower than any other State, may or may not have been to some extent due to the measures taken, but it is a remarkable fact that no child of the many hundreds that entered this State from other States, either on the journey or subsequent to arrival, developed the disease in a recognisable form. It is true that there may have been amongst them, or indeed amongst visiting adults, mild sub-clinical unrecognised cases, but this result speaks well for the careful and efficient isolation and quarantining of contacts of cases in other States. What cases did occur here, although abnormal in number, were so widely scattered in incidence and so unassociated one with the other as to suggest only a sporadic incidence rather than a spreading epidemic. Single cases occurred a hundred or more miles apart and with no local secondary cases.

The same peculiarity of incidence was noticeable in the metropolitan area where suburbs would record only one or two cases and no more.

These facts incline one to believe that only a normal sporadic prevalence existed here, but that owing to increased vigilance on all sides cases were recognised which might otherwise have been overlooked.

In view of our low incidence in past years it is difficult to believe that our freedom from the disease in true epidemic form has been due to a high immunity rate in the community. Although being a last port of call from New Zealand and all other States of Australia and a first port of call from Europe, it may be that our contact with infection in the past has been greater than imagined.

#### *Influenza, Bronchitis, and Pneumonia.*

A considerable number of deaths annually are due to the three conditions grouped above and more especially in elderly or aged persons. The table below shows deaths from each of these conditions during the last four years. The figures, it will be noted, do not vary materially from year to year, but are, if anything, slightly lower than usual during the years under review.

	1935.	1936.	1937.	1938.
Deaths from—				
Influenza ... ... ...	45	33	20	23
Broncho-pneumonia ... ...	145	149	108	120
Pneumonia ... ... ...	184	126	148	160
Bronchitis ... ... ...	41	44	33	38

#### *Tuberculosis.*

The table below indicates the prevalence of and mortality from all forms of tuberculosis during the last ten years. The gradual decline in incidence and mortality is very noticeable.

Year.	Cases notified.	Deaths.	Deaths per 1,000 of Population.	Percentage of Total Deaths.
<b>TUBERCULOSIS OF RESPIRATORY SYSTEM.</b>				
1929	400	245	0.58	6.2
1930	569	218	0.51	5.8
1931	372	223	0.52	6.1
1932	339	203	0.47	5.5
1933	295	207	0.47	5.5
1934	287	218	0.49	5.3
1935	270	210	0.47	5.1
1936	338	193	0.43	4.6
1937	239	172	0.38	4.23
1938	247	178	0.39	4.20
<b>OTHER FORMS OF TUBERCULOSIS.</b>				
1929	43	35	0.083	0.89
1930	20	32	0.075	0.85
1931	35	22	0.051	0.60
1932	24	18	0.041	0.48
1933	20	9	0.021	0.24
1934	11	24	0.054	0.59
1935	...	16	0.036	0.39
1936	4	16	0.036	0.38
1937	...	23	0.051	0.57
1938	...	12	0.026	0.28

Though much has been done, there still remain directions from which a further reduction of the "White Plague" can be brought about and a repetition of the fundamental requirements for control of this disease as expressed by the National Health and Medical Research Council is not out of place here:—

This Council considers that the fundamental requirements for the control of tuberculosis are the following:—

- A. The removal of the source of active infection from the family, since it is recognised that children are very vulnerable to

the disease. This involves either the admission of patients to sanatoria or the removal of children from the home. Sufficient accommodation should therefore be provided in sanatoria for the treatment of all tuberculosis patients.

B. It is necessary that the resistance of all members of the family should be maintained at the highest possible level.

The economic factor is definitely the most important aspect of the campaign against tuberculosis.

The wage earner of the family will not leave his family so long as he is able to contribute something towards its support.

Possibly the greatest advance towards the effective control of tuberculosis would be the provision of adequate financial support to insure the effective nutrition of the family under suitable environmental conditions.

The report of the Chief Resident Medical Officer of the Wooroloo Sanatorium will be found in the appendix.

#### *Endemic Typhus (Brill's Disease).*

Of this disease 37 cases were notified in 1937 and 38 in 1938 as against 36 in 1935 and 31 in 1936.

This disease, which is considered to be conveyed to man by the bite of the rat flea, can only be controlled by wholesale destruction of rodents. Fortunately the disease is not spread from man to man and is rarely fatal, though it involves a somewhat severe temporary illness and a protracted convalescence. Most cases occur in the metropolitan area and investigation usually shows in connection with each case that occurs, an undue prevalence of rodents either at home or at work.

Apparently eradication of this disease depends upon a constant and determined war upon rats and this is constantly being waged by local authorities.

#### *Leprosy.*

Of this disease 16 new cases were brought to light in 1937 and 45 in 1938. These cases, with one exception, occurred amongst the native population of the North-West. The exception was a white man from the same area.

All cases are, so soon as possible under the difficulties of transport in our northern areas, taken to the Leprosarium at Derby, where at present some 120 cases are now under treatment.

The patients are well cared for and comparatively happy on the lot. They apparently realise that everything possible is being done for them and make no effort to leave the institution which is situated some ten miles from the town of Derby.

Recently two police patrols, each with a medical officer, have gone into the more inaccessible parts of the Kimberleys where travel is restricted to horses and transport to mules. The two parties left Wyndham and Derby respectively and intend to comb the area for hitherto undetected cases and to bring these back to Derby. It is expected that each patrol will be absent from civilisation for at least three months and that they will finally meet at Mt. Hann and pool their cases for transport to the Leprosarium.

Eradication of the disease from our North-West depends upon the thoroughness and expedition with which infective cases can be removed from their fellows, segregated and treated, and it is because diseased natives can so easily evade discovery in certain areas that complete control is so difficult to attain.

More and more, however, is the native giving evidence of an increased confidence that the authorities have his own interest at heart and there is a definite tendency for cases to seek treatment and the care and comfort the Leprosarium affords.

#### *Puerperal Fever.*

During each of the years under review 29 cases of Puerperal Fever were notified to the Department and there were fourth deaths from this cause in each year.

Deaths from abortion numbered 8 in 1937 and 14 in 1938, both figures being lower than the previous year, when 18 were recorded.

Deaths from all other causes of the puerperal state numbered 24 in 1937 and 19 in 1938 as against 15 and 20 for the two previous years.

It will be seen that these figures vary but little and the relative percentages of deaths from the three main causes are approximately as follows:—

		1937.	1938.
Puerperal Septicaemia ..		11.1%	10.8%
Abortion .. .. ..		22.2%	37.8%
All other causes of the puerperal state ..		66.6%	51.1%

These figures indicate to what a considerable extent abortion, for the most part deliberate, is responsible for maternal mortality.

Detailed figures of the causes of maternal deaths are shown in the table below for the past five years:—

Year.	Live Births.	Deaths from :								
		Puerperal Septicaemia		Abortion.		All other causes of the Puerperal State.		All causes of the Puerperal State.		
		No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	
1934 ... ...	7,801	7	0.90	15	1.92	16	2.05	38	4.87	
1935 ... ...	8,119	4	0.49	12	1.48	15	1.85	31	3.82	
1936 ... ...	8,479	5	0.59	18	2.12	20	2.36	43	5.07	
1937 ... ...	8,609	4	0.46	8	0.93	24	2.79	36	4.18	
1938 ... ...	9,141	4	0.44	14	1.53	19	2.05	37	4.04	

*Smallpox.*

The following case illustrates the possibility of the entry of quarantinable diseases to this State and the increasing danger from this point of view of more rapid travel from overseas.

On the 22nd March, 1938, a female passenger left the "Strathaird" at Fremantle with mild symptoms of illness which in no way suggested any serious quarantinable disease. On arrival at the house of friends where she was to pay a short visit she shortly took to her bed and medical advice was sought. In a day or two her condition became so alarming that in view of her recent travel local health and quarantine officers were consulted and a diagnosis of Smallpox was made prior to the development of the true Smallpox rash. The patient, it was found, had been vaccinated shortly before leaving Bombay, but without result and showed no sign of previous vaccination. She died immediately on arrival at the quarantine station, showing only an extensive prodromal haemorrhagic rash of Smallpox and before the true rash had made its appearance.

No further case occurred upon the "Strathaird" nor amongst persons who had left the boat at Fremantle nor visitors from the shore, all of whom were located and vaccinated, but a secondary case occurred in the house to which the patient went on arrival in Perth. This case having been vaccinated in infancy developed the disease in a modified form and recovered.

This is the second occasion upon which Smallpox has made its appearance in a traveller from India after entry to the State, but in each case prompt action has prevented any widespread epidemic. This fact must not, however, give a false sense of security but only accentuates the need for travellers to and from Australia seeking the protection which vaccination gives.

*Venereal Disease.*

The total number of new cases of venereal disease notified during the two years now being reviewed was —for 1937, 913 and for 1938, 840, as against 775 in

1935 and 794 in 1936. These figures are higher than those of the two previous years but are nevertheless lower than those of earlier years.

The year 1938 shows a lower incidence than 1937, both in regard to syphilis and gonorrhoea, whilst in both years a marked reduction in syphilis is noticeable over previous years.

There is no doubt that this disease has very much declined in recent years as a result of the institution of compulsory measures requiring early and persistent treatment. The effect of such measures is much more noticeable in the case of syphilis than in gonorrhoea for the reason that modern treatment of the former disease more rapidly reduces infectiveness.

The tables hereunder indicate comparative figures for gonorrhoea and syphilis during the past four years:—

GONORRHOEA.					
	1935.	1936.	1937.	1938.	
Males ...	551	620	688	596	
PRIMARY SYPHILIS.					
Males ...	29	10	9	6	
Females ...	10	2	...	1	
SECONDARY SYPHILIS.					
Males ...	11	5	11	4	
Females ...	5	3	3	1	
TERCIARY SYPHILIS.					
Males ...	6	20	11	12	
Females ...	2	5	5	9	

The tables below present complete details of the cases notified to the Department of Public Health, the source of notifications, whether metropolitan or otherwise, and also indicate whether cases are new infections or uncured cases carried on from previous years and renotified:—

TABLE 1.  
VENEREAL DISEASE.

*Summary of Notifications Received for Year ended 31st December, 1937.*

Disease.	Male.	Female.	Total New Cases.	Total Notification Received.
Syphilis—Primary ...	9	...	9	13
Secondary ...	11	3	14	21
Tertiary ...	11	5	16	35
Congenital ...	1	...	1	2
Totals ...	32	8	40	71
Gonorrhoea ...	688	162	850	956
Granuloma ...	9	12	21	23
Chancroid ...	2	...	2	...
Grand Total ...	731	182	913	1,050

TABLE 2.  
VENEREAL DISEASE.  
*Notifications Received from Metropolitan and other Districts, 1937.*

Month.	District.	Syphilis.				Gonorrhoea	Chancroid	Granuloma	Totals.			
		Primary.	Secondary.	Tertiary.	Congenital.				Metropolitan.	Other.	Total.	
January ....	Metropolitan ....	....	....	....	....	38	....	....	38	....	44	
	Other ....	....	2	....	....	4	....	....	....	6	6	
February ....	Metropolitan ....	1	....	1	....	71	....	....	73	....	80	
	Other ....	....	1	....	....	6	....	....	....	7	7	
March ....	Metropolitan ....	1	1	1	....	90	....	....	93	....	105	
	Other ....	....	1	1	....	10	....	....	....	12	12	
April ....	Metropolitan ....	2	....	....	....	45	....	....	47	....	57	
	Other ....	....	....	....	....	9	1	....	....	10	10	
May ....	Metropolitan ....	1	2	....	4	56	1	....	64	....	77	
	Other ....	....	1	....	....	11	....	1	....	13	13	
June ....	Metropolitan ....	....	1	3	....	57	....	....	61	....	67	
	Other ....	1	1	....	....	4	....	....	....	6	6	
July ....	Metropolitan ....	....	....	....	1	66	....	7	66	....	93	
	Other ....	....	....	....	1	18	....	....	....	27	27	
August ....	Metropolitan ....	....	....	1	....	39	....	....	40	....	57	
	Other ....	....	....	1	....	14	....	2	....	17	17	
September ....	Metropolitan ....	1	....	1	....	69	....	1	71	....	83	
	Other ....	1	....	2	....	8	....	....	....	12	12	
October ....	Metropolitan ....	....	....	3	....	47	....	....	50	....	57	
	Other ....	....	....	1	....	3	....	3	....	7	7	
November ....	Metropolitan ....	....	....	1	....	72	....	....	72	....	87	
	Other ....	....	....	1	....	7	....	6	....	15	15	
December ....	Metropolitan ....	1	....	....	....	93	....	....	94	....	104	
	Other ....	1	....	....	....	8	....	1	....	10	10	
	Totals ....	....	11	12	19	1	845	2	21	769	142	911

TABLE 3.  
VENEREAL DISEASE—1937.

Month.	Hospital Clinics.				Private Doctors.		Prisons and Asylums.	Total.
	Children's.	Perth.	Fremantle.	Kalgoorlie.	Metropolitan.	Other.		
January ....	....	21	1	1	16	5	....	44
February ....	....	20	....	....	53	7	....	80
March ....	....	32	....	6	53	13	1	105
April ....	....	....	....	5	43	9	....	57
May ....	....	32	....	3	27	14	1	77
June ....	....	25	....	3	33	6	....	67
July ....	....	19	2	1	44	27	....	93
August ....	....	16	....	2	22	17	....	57
September ....	....	19	5	2	42	14	1	83
October ....	....	18	2	1	27	9	....	57
November ....	....	24	1	1	47	14	....	87
December ....	....	30	2	3	58	11	....	104
Total ....	...	256	13	28	465	146	3	911

TABLE 1.  
VENEREAL DISEASE.  
*Summary of Notifications Received for Year ended 31st December, 1938.*

Disease.		Male.	Female.	Total New Cases.	Total Notifications Received.
Syphilis—Primary	...	6	1	7	8
Secondary	...	4	1	5	6
Tertiary	...	12	9	21	29
Congenital	...	...	1	1	5
Total	...	22	12	34	48
Gonorrhoea	...	596	195	791	872
Chancroid	...	1	...	1	1
Granuloma	...	5	9	14	16
Grand Total	...	624	216	840	937

TABLE 2.  
VENEREEAL DISEASE.  
*Notifications Received from Metropolitan and other Districts, 1938.*

Month.	District.	Syphilis.				Gonor- rhoea.	Chan- croid.	Granu- loma.	Totals.		
		Prim- ary.	Second- ary.	Terti- ary.	Con- genital.				Metrop- olitan.	Other.	Total.
January	Metropolitan			2	2	64			68	19	87
	Other			1	...	18			...	...	
February	Metropolitan			...	1	77			77	1	78
	Other			...	...	...			...	...	
March	Metropolitan	1	...	1	...	70			72	8	80
	Other	...	...	1	...	7			...	...	
April	Metropolitan			1	...	49	1	2	50	7	57
	Other			...	...	4	...	...	...	...	
May	Metropolitan			1	...	43		1	44	13	57
	Other	1	...	...	...	11		...	...	...	
June	Metropolitan	1	...	1	...	64			66	8	74
	Other	...	...	...	...	8			...	...	
July	Metropolitan	1	1	1	...	49		1	50	14	64
	Other	...	...	...	...	11		...	...	...	
August	Metropolitan	2	...	1	4	49		1	52	16	68
	Other	...	...	...	...	11		...	...	...	
September	Metropolitan			...	...	55			55	4	59
	Other			...	...	4			...	...	
October	Metropolitan			...	4	58			62	17	79
	Other			...	...	17			...	...	
November	Metropolitan			1	...	56			57	8	65
	Other			...	...	8			...	...	
December	Metropolitan	1	1	1	1	54		1	56	16	72
	Other	...	...	...	...	13		...	...	...	
	Totals	7	5	20	1	800	1	6	709	131	840

TABLE 3.  
VENEREEAL DISEASE—1938.

Month.	Children's.	Hospital Clinics.				Private Doctors.		Prisons and Asylums.	Total.
		Perth.	Fremantle.	Kalgoorlie.	Metrop- olitan.	Other.			
January	...	14	...	2	66	5	...	...	87
February	...	26	...	...	51	1	...	...	78
March	...	23	...	1	49	7	...	...	80
April	...	20	1	...	26	8	2	...	57
May	...	26	...	1	18	11	1	...	57
June	...	19	1	1	50	3	...	...	74
July	...	17	2	1	32	12	...	...	64
August	...	18	1	...	32	17	...	...	68
September	...	21	1	1	33	3	...	...	59
October	...	21	1	2	39	16	...	...	79
November	...	18	5	1	34	7	...	...	65
December	...	17	...	1	39	15	...	...	72
Total	...	240	12	11	469	105	3	...	840

#### VISITING SISTERS.

The Department has upon its staff three qualified nurses whose function it is to supervise practising midwives, to inspect maternity hospitals, and to visit and advise notified cases of pulmonary tuberculosis in their homes.

During 1937 these officers carried out 425 inspections of maternity homes and in 1938, 390. Three hundred and thirteen midwives were visited in 1937 and 249 in 1938. Tuberculosis patients to the number of 1,982 were visited in 1937 and 1,921 in 1938.

In addition, there were 110 special visits made in 1937 and 74 in 1938.

#### MIDWIVES' REGISTRATION BOARD.

This body controls the training, practice, and registration of midwifery nurses within the State. In 1937, 86 candidates satisfied the Board's examiners and were registered, the number being 97 in 1938.

#### NURSES' REGISTRATION BOARD.

This Board controls the training and registration of general nurses. In 1937 there were 102 new nurses admitted to the register and in 1938, 214.

Following the necessary legislation in 1938 additional registers have been opened for children's nurses and infant welfare nurses.

General nurses are also now required to re-register annually.

### SCHOOL MEDICAL AND DENTAL INSPECTION.

During 1938 the school medical staff was reduced by one officer who left the service and of necessity the amount of work carried out in metropolitan schools has suffered. It is hoped to fill the vacancy shortly.

A detailed report of the work of the school medical staff will be found in the appendix.

A welcome innovation in connection with the school dental service is the school dental van to supplement the examination and treatment of children in outback districts previously deprived of the routine dental service. An additional dentist was appointed who himself drives the van and carries out the dental work in an excellently equipped mobile surgery, which is also equipped with facilities for cooking and sleeping. It is to be hoped that this is only the first of several such travelling clinics which are so necessary to meet the needs of the remote and widely scattered settlement characteristic of this State.

There are now four qualified dentists on the staff.

The report of the Senior Dental Officer is embodied in this report.

### INFANT HEALTH CENTRES.

The report of the supervisor of infant health activities will be found on pages 17-19 of this report.

### PATHOLOGICAL LABORATORY.

This subdepartment carries out pathological, bacteriological, and biochemical work of both a clinical and public health nature and does a great deal of work for hospitals and private medical practitioners.

The report of the Bacteriologist and Pathologist is at pages 19-22.

### MEAT INSPECTION.

Tables are submitted at pages 23-5 showing details of the work carried out by meat inspectors during the year. The number of carcases, part-carcases, and organs condemned on account of diseased conditions are shown.

### REPORT OF THE CHIEF RESIDENT MEDICAL OFFICER, WOOROLOO SANATORIUM.

*The Principal Medical Officer, Perth.*

Sir,—

I have the honour to submit my report for the years 1937 and 1938.

In doing so I must express my extreme personal regret that the question of the operation of the National Insurance Act has been deferred. All interested in preventive medicine, lay and medical, I am sure agree on its necessity and urgency; nobody more so than those interested in the question of tuberculosis. That many of the Act's features, as it stood, were neither palatable nor just, does not make void its desirability; inequalities can surely always be adjusted.

Embodied in the principles of such a measure must be co-ordination of administration and lines of investigation as to causes of activity of tuberculous infection, especially those due to social and industrial conditions.

### ANALYSIS OF FOODS AND DRUGS.

During 1937, 55 samples of food were submitted to the Government Analyst for examination as to compliance with the standards laid down in the Food and Drug Regulations. Ten of these samples failed to comply with the required standard.

In 1938 the number of samples examined was 27, of which 19 did not comply with regulations.

### INSPECTION OF FOODSTUFFS ARRIVING FROM OVERSEAS.

A departmental inspector gives a certain amount of his time to the inspections of foodstuffs arriving from overseas at the port of Fremantle. The following condemnations of food unfit for consumption were made:—

	1937.	1938.
Figs ..	24 lbs.	Bacon .. .. 5,942 lbs.
Fish ..	940 lbs.	Frozen Fish .. 10,920 lbs.
		Frozen Pork .. 100 lbs.

### LEGAL PROCEEDINGS UNDER THE HEALTH ACT.

Prosecutions for offences under the Health Act, together with result and fines imposed, are listed in the appendix.

For the most part these cases were conducted by departmental inspectors.

### SEPTIC TANK INSTALLATIONS.

The regulations require that plans of all septic tank installations shall be examined and approved by departmental officers. The amount of work involved is considerable—879 proposals in 1937, 907 in 1938.

In conclusion, I desire to record my appreciation of the assistance and loyal co-operation I have received from all members of the staff, to whom the successful working of the Department has been mainly due.

**EVERITT ATKINSON, M.A., M.D., D.P.H.,**  
Commissioner of Public Health.

### REPORT OF THE CHIEF RESIDENT MEDICAL OFFICER, WOOROLOO SANATORIUM.

*The Principal Medical Officer, Perth.*

Day after day one ponders over how, why and when activity takes place? The problems are constant, hence the necessity of continuous co-ordination of investigation and facts dealing with active disease. It is neither my duty nor desire to discuss the academic question, eternally in dispute, as to when infection occurs, *i.e.*, in childhood or later, but we have to face certain aspects of that question. One German writer holds that adult tuberculosis is the last verse of the song, the first verse of which was sung to the infant in its cradle. Who with a knowledge of the disease is going to deny this, and the French have taken this question up, particularly with their regulations and treatment of children who might be exposed to massive infection.

I have a few words to say on mass infection, especially regarding childhood, and indeed generally, but dealing with childhood, main mass infection of course must be—(a) bovine from milk; (b) parental; and it is of the latter that I wish to speak.

Information afforded me by patients entering here, shows they have been advised by responsible individuals who should know better, that by coming here they are in danger of mass infection. Ye Gods! Where patients are labelled, as against mass infection in public and private institutions where they are not labelled, and the conditions not all that they should be.

This leads me to the question of contacts, familial and conjugal, facilities for investigating which, to date, are not available. Seeing that the National Insurance Act, where a yearly overhaul was envisaged, has meanwhile lapsed, it now behoves the State to see that proper provision is made in metropolitan and district centres for examination of contacts. Advances in X-ray promise that by photographic methods, mass investigation of contacts will be comparatively easy in the near future.

Mass infection is associated with, how, when, and why, in close familial contact of young children under unsuitable conditions, hence the urgency of isolation of cases from their family, at any rate, until their adverse social conditions are adjusted, which brings me to the fact that it is useless to treat a tuberculosis patient, either medically or surgically, without reference to his economic conditions.

One has experience of a patient undergoing treatment with lung collapse and progressing satisfactorily, being forced by his economic position to go out labouring on road work in the height of summer. What chance had he to maintain improvement or continue the treatment?

Moreover, success in dealing with the tuberculosis question depends on permanent after-care in all cases.

The Child Welfare Department is concerned with the maintenance of a patient's family whilst under treatment, and there is a not unnatural expectation that when treatment at an institution is discontinued, the sufferer becomes again a standard worker able to support his family, whereas every tuberculosis individual, as I have before pointed out, is permanently substandard physically and economically.

It is sometimes assumed that a case, say of unilateral pulmonary tuberculosis, has been apparently definitely permanently "arrested" by surgical or medical treatment, but there is no guarantee that the other lung may not light up, or even the "cured" lung. Hence the necessity of permanent after-care.

Repeatedly I have tried to emphasise that the process of permanent arrest is slow and depends on raising the body resistance, factors concerned therewith being, of course, housing, proper nutrition, habits, conditions of work, and the treating of all intercurrent infections and diseases. The question of climate is, on the whole, secondary. It is almost an axiom to say that "It does not matter so much where you live as to how you live."

This certainly opens up many issues and the question of proper nutritional values in outback life is one of them.

The class of case treated in the Institution has been very similar to that in previous years, the majority being of an advanced nature. For the nonce this is not surprising, as it is the mode at present for every case to consider itself suitable for lung collapse at the hands of the physician, or surgical measures at the hand of the surgeon.

This wave of fashion, as in medicine and surgery generally, is fairly world wide, although even now the vogue of reasonable consideration of each case on its merits, for conservative treatment, is returning.

In considering the histories of those admitted, I have been struck in many cases by the lack of consideration given to the danger signals of the disease, neglect to follow up pleurisy which seems to be regarded as an entity rather than as a condition or sign of some other disease, haemoptysis, aphonia, "cigarette cough."

It is, of course, easy to be wise after the event, but one cannot help being struck with the feeling of relief, content and satisfaction which apparently has been engendered by the examination of one specimen of sputum, with no tubercle bacilli found, whereas repeated examinations and special measures are frequently necessary before one is justified in saying that tubercle bacilli are not present in sputum, *e.g.*, examination after antiformin treatment of the sputum, a film from cough spray of laryngeal mirror, clinical administration of certain drugs, examination of gastric contents, inoculation of guinea-pigs. Laboratory inquiries regarding sputum, to be definite, require cultural examinations. Who then is going to say that tuberculosis is not present on one examination?

However, let us get back to an old axiom that tubercle bacilli in sputum does not indicate an early case. This has been capped by the Sydney T.B. officer's slogan, "Pulmonary tuberculosis is first seen (X-ray), not heard (stethoscope)."

One frequently asks the question, "Were you X-rayed when you had the pleurisy?" Too often a negative reply is received.

The same with chronic throat conditions with aphonia; the abstruse is frequently sought when an examination of the chest with X-ray would clarify the situation.

These few points I merely use to illustrate how in many cases early diagnosis could be arrived at, when permanent result from early knowledge of the tuberculous condition and treatment could obviate the necessity of lung collapse or surgical measures, which do not shorten the period of treatment; one sees cases undergoing such treatment many years after its inception.

One reverts back, then, to the "ideal" of Prevention of Pulmonary Tuberculosis; and the necessity for early diagnosis.

There seems to me, for some reason, an increase in the number of cases of tuberculosis involving the mouth, tonsils, pharynx and upper respiratory tract. Despite cheap sneers at early Victorian ideas, I sometimes wonder how much is due to habits, *e.g.*, cosmetic practice of lipstick, cigarette smoking, etc. From my point of view, those working in an area where possible air infection abounds certainly offer a good catchment area on their lips by the use of lipstick, this being subsequently more or less ingested with their food and fluids.

It may be that more of them are being sent here, but the fact remains that there seems to be an increasing number. These lesions are all very intractable and distressing forms of complication, both for the sufferers and their attendants.

It certainly gives much food for thought and such cases arrive from country districts as well as town.

It is very difficult to reconcile these cases with open country life, but some of the advanced and distressing cases have come from decidedly country, healthy conditions, farm and station.

I do not think that there has been any reason for regret for coming here for treatment, on the part of those who could be regarded as definitely early cases, and who have subsequently been discharged as having no active signs or symptoms of disease.

Of others diagnosed later and discharged as stationary, many have shown permanent improvement, whilst, of course, others perforce have had to return to a "vicious circle" environment, *i.e.*, the conditions under which they previously broke down, and have shown retrogression, some being readmitted, others remaining outside to infect contacts. It is remarkable how quickly retrogression ensues outside the routine life of an institution.

Regarding the treatment of pulmonary tuberculosis, there is no question as to the advances on the surgical side, the only warning, to my mind, is to go slowly, not to ride it to death; not to promise that it can do everything, nor yet that it can be done quickly; that it is not necessary in every case, and that it is not suitable in every case; that it should be available to suitable cases without being an economic burden, and that their social conditions should be made such that it does not become so to themselves or family, otherwise the T.B. problem is in no wise simplified.

This leads me again to refer to Papworth Village Settlement and its activities, which seem to go a long way to solve the problem for sufferers and families. Whilst in these days of financial stress it seems futile to present such a scheme or idea, the situation has to be faced.

Those cases unsuitable, from the nature of their infection, for surgical treatment, one builds up to a state where they are able to return to their ordinary life, but if they are simply returning to resume a humdrum existence without any periodic relief, where are we getting?

I advise these cases that they ought to have a break from their environment every year. Those who are sensible and fortunate enough to be able to do so find consequent benefit.

As regards drugs, gold continues to be used.

Personally, I still continue to use Tuberculin, and am of the opinion that in some cases it has effected great improvement, but it is a two-edged sword and cannot be used carelessly or with impunity. There was an attempt to revive the use of Turtle Tuberculin, a fashion about 25 years or more ago, brought out and boomed by Dr. Friedman. It had a short vogue.

An outstanding innovation in treatment which I think will continue to be extended is the treatment of the secondary infection in tuberculous disease by the Sulphanilamide group of drugs. It has long been recognised that treatment of secondary infections was important, and this group promises most success to date.

Institutionally, all activities continue in their normal spheres. Routine sputum examinations, X-ray and clinical examinations are carried out as required.

The nursing staff carry out their duties under a forty-eight hour a week basis, days off accumulating for four weeks as against weekly time off. In the case of the other working staff except the farm, they work on a forty-four hour week. In the case of the orderlies and domestic staff their time off accumulates on a four week basis.

The health of the staff, except for minor ailments, has been good.

The farm has been put on a more assured basis by further clearing being carried out by the Lands Department with men on sustenance, and this has proved of mutual benefit to the Institution and to most of those engaged in the work. I personally have heard expressions of satisfaction with the improvement in the health of many of those employed in the work.

The poultry yard has been reorganised. It has been difficult to justify its existence on the score of cost, of recent years, but having now been put on a proper basis by the Government Poultry Adviser, it is expected to more than justify its existence. One regrets that its present justification is contributed to by the current lamentable price of wheat.

The Progress and Pastimes Club Committee continues its zealous work on behalf of fellow patients, whilst the Welfare Committee continues to give yeoman service in the interests of the patients, being assiduous in relieving clothing requirements, administering Christmas cheer, as far as funds will allow, and above all, by evidencing a personal interest in the well-being of patients and their friends.

The Institution is indebted to the chairman and members of the Lotteries Commission for the generous consideration of urgent requests, whereby the conditions of the patients have been ameliorated.

A feature of the social amenities has been the provision of a wireless listening-in installation, which has been effected through the generosity of the Postal Electricians' Union, members of which gave freely of their time to carry out the work of installation, whereas financial necessities were attended to by Wireless Stations 6AM and 6PM and associated stations.

Our thanks and gratitude are extended to the members of these particular organisations, and whilst it is invidious to particularise, special mention might be made of Mr. V. R. Anderson, secretary of the Postal Electricians' Union, and Frank Whitford, manager of 6AM. The staff of 6AM, stimulated by Aunty Peggy and Mr. Bill Talbot, continue their good work by carrying out arrangements for concerts and other social amenities.

We are indebted to various other bodies for concerts, which serve to relieve the monotony of the life of those condemned indefinitely through their disability to Institution life.

Various religious organisations continue to give general and unstinted service. It is again invidious to mention any in particular.

The thanks of the patients and staff are extended to the various ministers of religion who visit the Institution to carry out very exacting duties.

It is difficult to express adequate appreciation of the services of the Superintendent and Officers of the Dental Hospital, one or other of whom attends

weekly for extractions, treatment and dentures. It is a matter of congratulation that this service is so faithfully carried out as the benefits are inestimable.

I have to thank the Medical Superintendent, Honoraries and Staff of Perth Hospital for their continued courtesies and assistance at all times.

The departmental visiting nurses continue to carry out their work assiduously. I appreciate their valued information and reports regarding cases.

We have to thank the donors of Christmas cheer, goods in kind at other times, as well as literature.

I have the honour to be Sir,

Your obedient servant,

ROBERT M. MITCHELL,

Chief Resident Medical Officer.

1937.

*Treated in Hospital.*

In hospital	January 1st	..	..	145
Admitted	..	..	..	207
Discharged	..	..	..	170
Deaths	..	..	..	66

*\* Age Incidence—Those Treated.*

		Males.	Females.
1-15	..	2	2
16-20	..	8	8
21-25	..	13	17
26-30	..	27	23
31-35	..	27	20
36-40	..	32	13
41-45	..	21	11
46-50	..	16	2
51-55	..	20	7
56-60	..	28	5
61-70	..	33	3
71-80	..	13	1
		—	—
		240	112
		—	—

*Age Incidence—Deaths.*

		Males.	Females.
1-20	..	2	1
21-25	..	1	2
26-30	..	4	7
31-35	..	7	2
36-40	..	4	1
41-45	..	4	nil
46-50	..	2	nil
51-55	..	4	nil
56-60	..	9	1
61-70	..	9	2
71-80	..	4	nil
		—	—
		50	16
		—	—

*Occupations.*

Males:			
Labourers	..	..	79
Miners	..	..	36
Gardening and farming	..	..	24
Shophands	..	..	21
Engineering, motors, etc.	..	..	18
Clerical	..	..	16
Pensioners	..	..	9
Pastoral	..	..	6
Hotel, brewery	..	..	5
Timber, sleeper-cutting	..	..	5
Students, school	..	..	3
Carpenters	..	..	3
Caretakers	..	..	2
Cooks and bakers	..	..	2
Barbers	..	..	2
Stonemasons, bricklayers	..	..	2
Aborigines	..	..	2

*Occupations—continued.*

Males—continued:

Wickerworker	..	..	..	1
Steward	..	..	..	1
Tailor	..	..	..	1
Commercial traveller	..	..	..	1
Dentist	..	..	..	1
Hawker	..	..	..	1
Lumper	..	..	..	1
Orderly	..	..	..	1

Females:

Domestic	..	..	..	87
Clerical	..	..	..	4
Dressmakers	..	..	..	4
Shop assistants	..	..	..	3
Barmaids	..	..	..	3
Pensioners	..	..	..	3
Cooks	..	..	..	2
School	..	..	..	2
Aborigines	..	..	..	2
Waitress	..	..	..	1

1938.

*Treated in Hospital.*

In hospital	January 1st	..	..	116
Admitted	..	..	..	190
Discharged	..	..	..	102
Deaths	..	..	..	64

*Age Incidence—Those Treated.*

		Males.	Females.
1-15	..	3	2
16-20	..	2	12
21-25	..	8	17
26-30	..	19	19
31-35	..	30	20
36-40	..	26	17
41-45	..	12	5
46-50	..	12	7
51-55	..	19	8
56-60	..	22	5
61-70	..	27	2
71-80	..	10	2
		—	—
		190	116
		—	—

*Age Incidence—Deaths.*

		Males.	Females.
1-20	..	1	1
21-25	..	2	4
26-30	..	4	1
31-35	..	6	4
36-40	..	3	2
41-45	..	1	2
46-50	..	4	2
51-55	..	5	1
56-60	..	3	2
61-70	..	9	1
71-80	..	5	1
		—	—
		43	21
		—	—

*Occupations.*

Males:			
Labourers	..	..	42
Miners	..	..	34
Shophands	..	..	17
Clerical	..	..	19
Pensioners	..	..	12
Motors and engineering, blacksmiths	..	..	11
Farm	..	..	11
Gardening, farming	..	..	9
Pastoral	..	..	5
Stewards	..	..	4
Timber worker	..	..	1
Butchers	..	..	3
Railway employees	..	..	2
Fisherman	..	..	1
Orderlies	..	..	2
Lumpers	..	..	2
Aborigines	..	..	2

*Occupations—continued.**Males—continued:*

Caretaker	..	..	..	..	1
Wireless operator	..	..	..	..	1
Barman	..	..	..	..	1
School	..	..	..	..	1
Sailor	..	..	..	..	1
Barber	..	..	..	..	1
Baker	..	..	..	..	1
Stonemason	..	..	..	..	1

*Occupations—continued.**Females:*

Domestic	..	..	..	..	98
Clerical	..	..	..	..	5
Cooks	..	..	..	..	3
Aborigines	..	..	..	..	3
Dressmakers	..	..	..	..	2
School	..	..	..	..	2
Waitresses	..	..	..	..	2
Barmaid	..	..	..	..	1
Shop	..	..	..	..	1

**SCHOOL MEDICAL OFFICER'S REPORT.***The Commissioner of Public Health.*

I have the honour to submit the following report in connection with the medical examination of school children during the years 1937-38.

Whilst the School Medical Staff was increased by one full time school medical officer during 1936-37, this officer's services were dispensed with at the end of 1937, and since then the school work in the metropolitan area has been gravely neglected, as there has been only one medical officer working half time on this work. The country officer works full time with her schools in the country, so the country children are adequately dealt with, but the examination of the children in the metropolitan area is getting hopelessly behind.

In 1925 there were three full time nurses and two full time school medical officers working in the metropolitan area only. Now, fourteen years later, even though we know the number of schools in the metropolitan area has increased considerably, we find that the school medical staff for the metropolitan area has been cut down to such an extent that we now have one less nurse and one less school medical officer than we had then. In other words, we now have two nurses and one school medical officer working half time. In addition, this officer has to devote a certain amount of her time to giving lectures to the Teachers' College students, which is essential, but which at the same time reduces her time for the examination of school children even further.

Consequently, it will be seen from an examination of the figures in connection with the number of children examined that the number of children so examined in the metropolitan area has dropped very considerably.

It is urgently needed that the school medical staff should be brought up to its full strength by the addition of at least one, if not more, nurses, and another school medical officer who will do full time work in the schools. To really do the work properly, in conjunction with the lectures given at the Teachers' College, it is necessary to have two full time school medical officers doing this work only.

The home visiting or "follow up" of the children referred by the doctor for medical attention is a most important part of our work if the best results from the medical examination are to be obtained, hence the need for an increased staff of school nurses. The parents need a tremendous amount of education in the care of their children and a great deal of persuasion to get the necessary medical attention. These remarks, of course, do not apply to all parents, but they apply to the great bulk of the ones we see.

Another necessary and valuable section of the school nurses' work is the maintenance of cleanliness among school children, and it is gratifying to be able to report that their work, together with the very strong co-operation given to them by the teachers, has resulted in raising the standard of cleanliness in the metropolitan schools during the two years under consideration. The figures have been got down to the lowest that we have yet achieved in this State. The percentage of dirty heads for 1937 was 3.9 per cent. in State schools and 6.3 per cent. in convents, whilst in 1938 it was 3.8 per cent. for State schools and 5.2 per cent. in convents. It is very gratifying to see these low figures, particularly when it is remembered that it is not so many years ago when the percentage was as high as 15 per cent. for the metropolitan area. However, with dogged perseverance it should be possible to get these figures down even lower. It is found that when the standard of cleanliness in the heads of the school children is improved, then their whole general standard of cleanliness is improved, and that is one of the reasons why such a point is made of getting this percentage as low as possible.

The Teachers' College has been reopened and lectures in hygiene are being given by a member of the school medical staff.

Still nothing has been done in the way of establishing any permanent educational holiday camps or special outdoor schools. We have an ideal climate and ideal conditions for establishing such camps, and furthermore, these camps would be of the utmost value to many of our under-nourished and under-developed children. They could stay there for three, six or twelve months according to their need and be improved in physique as well as being trained in an hygienic mode of life. The benefits accruing to children, could one of these camps be established, would be of the utmost value to the State as it would help to raise an A1 race. At present people are inclined to think that because we have a good climate and open spaces all is well, but this is far from being the case.

It will only be well when more consistent school medical work is able to be done amongst ALL our school children.

E. M. STANG,  
Senior Medical Officer of Schools.

5th July, 1939.

## SCHOOL CHILDREN EXAMINED DURING 1937.

## METROPOLITAN AREA.

Routines.														Recalls.	
Number Examined.		Number Notified.		Number referred for Medical Attention.		Number referred for Dental Attention.		Number referred for Home Attention.		Number referred for Pediculosis.		Specials.			
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
4,129	3,916	2,626	2,580	692	668	1,506	1,506	1,453	1,340	5	27	165	89	1,890	1,854

  

COUNTRY AREA.															
4,261	3,987	2,559	2,459	756	696	1,236	1,319	1,617	1,563	35	156	2	...	22	10

## SCHOOL CHILDREN EXAMINED DURING 1938.

## METROPOLITAN AREA.

Routines.														Recalls.	
Number Examined.		Number Notified.		Number referred for Medical Attention.		Number referred for Dental Attention.		Number referred for Home Attention.		Number referred for Pediculosis.		Specials.			
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1,624	1,676	1,176	1,313	240	274	869	956	493	663	...	...	67	33	717	770

  

COUNTRY AREA.															
4,250	4,087	2,490	2,541	674	631	1,261	1,316	1,870	1,820	67	306	...	...	19	32

## REPORT OF THE SENIOR DENTAL OFFICER IN SCHOOLS.

*The Commissioner of Public Health.*

I beg to submit my report on the activities of the school dental staff for the years 1937 and 1938.

During this period occurred, in my opinion, the most momentous event since the inauguration of the school dental service—that is—the building and equipping of a travelling school dental van. This was first definitely decided upon at the end of 1937 when it was realised that children attending small country schools were deprived, under ordinary conditions, of obtaining dental treatment. The capital cost of the van and equipment was to be provided by the Lotteries Commission, while the salary of an extra dentist and the running costs were to be met by our Department. After a lot of delay in the choosing of a suitable chassis and in the building of the body, the van was finally put on the road during November, 1938. Mr. J. W. Cole, the man chosen to use the van, although comparatively young, seems quite capable of looking after the vehicle and doing

his work in a capable manner. I say this after spending several weeks on the job in his company. We tried the van out first while doing a few small schools in the hilly districts near Perth and since then it has been busy among the group settlements in the South-West. Owing to its bulk, some of the roads are difficult to traverse and Mr. Cole has had, in some cases, to cut away side bushes and overhanging branches.

We have received a number of letters and verbal messages of appreciation from the country concerning the van and there is no doubt that it is rendering a valuable service in visiting districts which were impossible for the ordinary dental staff owing to lack of accommodation. Mr. Cole carries his surgery with him, while the remainder of the staff have to improvise one, and while that is all right in the bigger schools, it is impracticable in the smaller ones.





At the schools visited by the van children of all ages are being attended, the work not being confined to those who are 6 and 7 years of age as has been necessary in the larger schools. We also hope that Correspondence pupils and other children living too far away to attend schools will be able, sometimes and somehow, to make arrangements to use the facilities offered.

Photographs of the interior and exterior of the dental van are attached to this report.

At the beginning of 1937 Mr. O'Keefe resigned and from a number of applicants Mr. E. J. Turnbull, who formerly acted in a temporary capacity, was chosen to fill the vacancy and my experience since with him indicates that the choice was a wise one.

During the period under review the following numbers and types of schools were visited:—

Metropolitan-Suburban State Schools	..	38
Country State Schools	..	32
Country Convent Schools	..	13
Orphanages and other Institutions	..	15

The number of children examined was 8,565. Of these 4,739, with the consent of parents, were treated, 1,075 needed no attention, 440 were to be done by private dentists, while the balance were those whose parents did not reply to the notices sent out.

Operations performed were as follows:—

Copper Amalgam fillings	..	..	6,565
Silver Amalgam fillings	..	..	384
Cement fillings	..	..	1,800
Silver Nitrate treatments	..	..	4,871
Porcelain fillings	..	..	139

Other fillings	..	..	..	264
Extractions	..	..	..	13,821
Scaling and cleaning	..	..	..	842

School vacations at different periods of the year were spent at the following institutions:—

Salvation Army Girls' Home, Cottesloe.  
Fairbridge Farm School.  
Salvation Army Seaforth Homes, Boys and Girls.  
Salvation Army Boys' Home, West Subiaco.  
Methodist Home, Victoria Park.  
Moore River Native Settlement.  
Clontarf Orphanage.  
Parkerville Homes.  
Swan Boys' Orphanage.

Claremont Mental Hospital was visited regularly on Saturday mornings, while several visits were also made to Heathcote. The following work was done at these institutions:—

Number of patients examined	..	..	2,019
Extractions	..	..	2,197
New dentures made	..	..	59
Repairs to dentures	..	..	85
Scaling and cleaning teeth	..	..	49

The mechanical work necessary in making and repairing dentures was done in conjunction with the Dental Hospital.

A. G. McKENNA,

Senior Dental Officer of Schools.

14th June, 1939.

#### REPORT OF THE MEDICAL SUPERVISOR OF INFANT HEALTH CENTRES.

*The Commissioner of Public Health.*

I have the honour to submit my report on the Infant Health Centres for the years 1937-1938.

The number of centres and sub-centres now under the control of the Infant Health Association has considerably increased since my last report. For example, Geraldton and Dongarra have now each a centre and sub-centre, also Beverley and Brookton have started. Brunswick Junction has now a sub-centre from Bunbury, and Koorda, Bencubbin, Dowerin, Mannanning and five other towns in the area have a travelling centre between them. This travelling centre, which has been established at Koorda, is a new idea and is the first of its kind in Western Australia. A nurse has been appointed and she travels by car in more or less of a circle taking in different towns, some once a week and others once a fortnight. This travelling centre of nine towns is visited by the nurse who covers about 700 miles.

Now that most of our bigger towns in Western Australia have been supplied with centres, I think our future development will be along the lines of establishing travelling clinics to cover certain areas. For example, it is now under consideration for such a clinic to be established to cater for Morawa, Dongarra, Carnamah, Three Springs, Mingenew and Mullewa. It is hoped that as a result of the success achieved in these centres, other scattered areas will follow suit. Already much interest has been created in this direction and inquiries are constantly being received in regard to the possibility of starting centres in other districts. Norseman is also working to get a centre established there.

During the last two years many new model centre buildings have been built by committees. We now have model centres at Albany, Katanning, Bunbury and Wiluna. The centres at Wiluna and Katanning have quarters for the nurse incorporated in the buildings.

In the city we have a new centre at Mosman Park, and at South Perth and Midland Junction centres are now in the course of erection. In addition, two or three other centres whilst not actually having commenced their buildings have the money well in hand and the buildings should be started before the end of this year. These buildings are built in the most modern style and thoroughly equipped to carry out their purpose efficiently and satisfactorily.

Lectures to infant health nurses are still being given at regular intervals throughout the year by doctors who are specialists in the subject upon which they lecture.

Previously a small library was started for the Infant Health Sisters and it was hoped to add to this library each year, but the matter has not been proceeded with as it was found the sisters did not take advantage of the books made available to them.

A good deal of educational propaganda work has been done to stimulate infant health work and to educate the public on all subjects in connection with the care of the young baby. Bi-weekly health talks are given on infant health and general health matters over a radio network which covers all country and metropolitan listeners. Also the correspondence nurse contributes weekly articles to over 30 country newspapers.

It is hoped to establish a new position very shortly in connection with infant health for the sole purpose of carrying on publicity and also giving mother-craft lectures to adolescent girls in schools and colleges and to those members of the general public who desire the lectures. Here, again, of course the difficulty is to raise the necessary money, but it is hoped that the money will be raised this year and the position established. If so, this will be a step forward in the right direction because the old adage "it pays to advertise" is particularly true in infant health work owing to the fact that there is always a new generation of mothers coming forward who seem to have no knowledge of the correct care of the young baby. In many cases they are not given this instruction either in the schools or their home, so how can they be expected to know? In fact, it is for this reason that infant health centres have been found so very necessary and why they are availed of by the mothers. There is no compulsion at all upon the mothers to come and yet we find that a big percentage of all babies born in Western Australia each year link up in one way or another with our health centres.

As mentioned in the last report, some of our centres are too big for one nurse to work satisfactorily and it is to be hoped that the time is not far distant when more satisfactory arrangements can be made in regard to the financing of the centres so as to enable the nurse to be relieved of this burden and also so that the mothers who attend these large centres can be given more individual attention than they at present receive. To cope with this position assistant nurses are necessary.

It has been found necessary to continue the Baby Week appeals because in this State the work is not financed by the Government, but merely assisted in the form of a subsidy of £100 per centre, consequently the rest of the money has to be found from other sources. The Lotteries Commission provide some of the money, but the rest has to be found by the general public. The local committees are responsible for the raising of this money and it is to help them that the Annual Baby Week Appeal is held. These appeals are very difficult to run as it is hard to find a capable organiser and also because the general public—other than those who actually benefit from the centres—do not see why they should be called upon to find money for what they consider is a necessary social service. The argument is constantly being put forward by the public, why should not the Government accept the financial responsibility for the infant health centres in the same manner as they do for the school medical services, dental services, etc., and as is done by other States of Australia.

In the majority of cases local committees are finding it more and more difficult to raise their commitments and the consequence is that they are finding it difficult to keep the members of the committee. Where committees have to find a certain sum of money for the erection of a building, furnishings, etc., this they do not mind because they can definitely see the end in view, but, it is a totally different matter when they have to commit themselves to finding a set sum of money every year and they find it too much of a commitment to undertake as a regular thing. This is the reason why it is so difficult to find people prepared to go on the committees and accept this responsibility.

It is most earnestly hoped for the stability and security of the work—and no one will question the fact that it is a national work—that the Government will soon be able to find themselves in a sufficiently sound financial position to accept the responsibility for the maintenance of this work, as they do for the maintenance of school medical and school dental services. In saying this, no reflection is intended upon local committees, because they have been doing far more work than the general public has the slightest conception of. In the majority of cases, however, they are finding the strain too great. It is not the initial expense of the establishment of the centre that is the difficulty, but the constant worry of yearly maintenance.

The Infant Health Association is fortunate in having a very fine body of nurses working at their centres and it is due to the interest that these sisters take and the fact that in many cases they look upon it as their life's work that the centres are able to keep going, even though, in some cases, they are constantly overworked. I would like to take this opportunity of thanking all those sisters who have done so admirably during the past two years and maintained our work at such a high standard.

The figures for the infant health centres, excluding the correspondence section, are as follows:—

Centre.	Total No. of Individual Cases dealt with.	Total Attendances of Babies.	Total No. of Visits to Homes.	Total No. of Consultations.	No. referred to Doctor or Hospital.		Total No. of Cases where lactation restored.	
					Mothers.	Babies.	Entirely.	Partly.
Total for the Year 1937 ...	9,461	91,263	19,426	114,352	452	1,172	205	383
Total for the Year ending 30th June, 1938 ... ...	8,899	85,447	18,123	111,631	400	1,024	194	353

It will be noted that the figures for 1937-1938 show a very great increase over those of the preceding two years. The figures for 1937 appear to be much higher than those for 1938, but it must be realised that the figures for 1938 are lower because a new method of keeping records was brought into force for the purpose of preventing a certain amount of overlapping which it was thought had been taking place. So that actually, the figures for 1937 are higher than they should be and those for 1938 give a true record of the actual position.

*Report of Infant Health Correspondence Scheme from its inception in December, 1932, to December, 1938.*

Number of mothers who have written ..	8,586
Number of expectant mothers who have written .. .. ..	2,378
Number of letters received .. ..	31,266
Number of letters written .. ..	33,757
Numbers of sets of patterns sent ..	2,382
Visits paid by mothers to the centre ..	5,600

The nurse in charge of the Correspondence Infant Health Nursing Scheme reports as follows for 1937-1938:—

	1937.	1938.
Individual mothers on the roll ..	1,856	1,859
New mothers .. .. ..	1,242	1,386
Expectant mothers on the roll ..	344	457
New expectant mothers .. ..	284	419
Total consultations re expectant mothers .. .. ..	592	695
Total number of letters received	5,020	5,292

Total numbers of letters written	5,292	5,517
Mothers who have visited the centre	1,132	1,187
Sets of patterns sent .. ..	245	402
First circular letters sent .. ..	2,240	2,198
Follow-up circular letters sent .. ..	2,457	1,948
Broadcast talks from 6AM and 6PM given weekly.		
Weekly articles published in thirty country newspapers.		

The correspondence nursing scheme is more than fulfilling the hopes which were entertained for it when it was commenced, as it is proving a great boon to all "outback" mothers who are not otherwise able to get in touch with an infant health nurse.

The number of country mothers who visit the nurse at the centre when they come to town is increasing every year, and last year 1,187 individual mothers visited the centre. As a matter of fact, it is through the publicity given to infant health work by the Correspondence Nursing Scheme and by the realisation of the benefits that mothers can have from properly trained infant health nurses, that we have succeeded in getting so many new centres started during the last two years. We have found that many of the most ardent workers to get these centres started have been mothers who have themselves actually benefited from the Correspondence Nursing Scheme.

E. M. STANG,  
Medical Supervisor of Infant Health  
Centres in W.A.

## REPORT OF THE GOVERNMENT PATHOLOGIST AND BACTERIOLOGIST.

*The Commissioner of Public Health.*

I submit herewith a record of work done in the Public Health Laboratory for the years 1937 and 1938.

The work of this laboratory includes all the pathology and bacteriology sent by doctors and hospitals throughout the State, also medico-legal examinations done for the police, also general public health examinations, such as water supplies, sewage effluents, and work on milk and butter done for local authorities and butter factories. We only do part of the work for the Children's Hospital and the Perth Hospital as they have smaller laboratories of their own. The part of the work we do for the latter is the preparation of their culture media, their stains, blood-grouping sera, the performing of virulence tests for diphtheria, guinea-pig tests for tubercle, Wassermann reactions and so on.

As regards diphtheria—the number of swabs examined for 1937 was over 10,000 but only 6,775 for 1938. The numbers vary a good deal from year to year, the number of swabs being in relation to the incidence of the disease. There has been a good deal of preventive inoculation against diphtheria done during the last two years and this may account also for the decline in the number of swabs examined.

Smears for leprosy have increased very much during the two years. This is due to more active measures being taken to round up suspected cases and to have them verified.

Examinations of blood for the enteric group of diseases keeps about the same level as the previous two years. We have, however, rather more cases of Brills disease nowadays than of typhoid.

The number of smear examinations for venereal disease is large, over 6,000 for each year. The numbers are so large because we have taken over this additional work of the Perth Hospital. All venereal disease clinics and hospital wards in Perth Hospital now send the work here. This sends the blood tests up too; Wassermann reactions reached nearly 4,300 in 1938.

Examinations of water supplies have risen to 700 during 1938. A great part of this is work done to keep a check on the purity of Perth's water supply. This supply comes from many different sources and a constant weekly examination goes on in the laboratory.

The general tendency is for laboratory work to increase; during the past years the number of tests required of us creep up gradually. The figure for 1937 was 25,501; for the year 1938, 22,378.

W. S. MCGILLIVRAY, M.B., Ch.B., D.P.H.,  
Bacteriologist.

6th June, 1939.

	1937.	1938.	1937.	
<i>Syphilis and Gonorrhoea—</i>			<b>CHEMICAL AND GENERAL.</b>	
Wassermann reactions ..	3,821	4,289	Uries for microscopic examination ..	261
Smears for Sp pallida ..	11	14	C.S.F.'s. for microscopic examination ..	31
Smears for gonococci ..	6,604	6,160	C.S.F.'s. for sugar .. .. ..	1
Uries for gonococci ..	—	19	C.S.F.'s. for protein .. .. ..	17
Complement fixation (gonorrhoea) .. .. ..	691	984	C.S.F.'s. for chlorides .. .. ..	7
<i>Diphtheria—</i>			Uries for sugar .. .. ..	7
Swabs (throat and nasal) ..	10,728	6,775	Uries for urea .. .. ..	166
Swabs (virulence test) ..	2	1	Bloods for urea .. .. ..	124
<i>Tuberculosis—</i>			Bloods for sugar .. .. ..	68
Sputa .. .. ..	737	871	Bloods for Van den Bergh .. .. ..	4
Pus .. .. ..	6	3	Bloods for coagulation rate .. .. ..	4
Uries .. .. ..	24	17	Bloods for grouping .. .. ..	4
Pleural fluids .. .. ..	4	3	Bloods for count .. .. ..	23
Faeces .. .. ..	2	2	Blood films (differential count) .. .. ..	28
Stomach residues .. .. ..	2	3	Faeces for occult blood .. .. ..	40
Milk .. .. ..	3	10	Test meals .. .. ..	4
Cerebro-spinal fluids .. .. ..	1	1	Pregnancy tests .. .. ..	2
Guinea pig inoculations .. .. ..	46	54	Worms for identification .. .. ..	3
<i>Typhoid fever, including para-typhoids—</i>			Material passed P.R. .. .. ..	1
Bloods for agglutination .. .. ..	132	215	Medico-legal examinations .. .. ..	42
Faeces .. .. ..	49	48		
Uries .. .. ..	48	35		
Blood cultures .. .. ..	2	2	<b>Total</b> .. .. .. ..	<b>837</b>
<i>Brill's disease—</i>				
Weil Felix reactions .. .. ..	135	217	<b>VACCINES.</b>	
<i>Leprosy—</i>			Respiratory tract .. .. .. ..	8
Smears (nasal and skin) .. .. ..	204	119	Pyogenic infections .. .. .. ..	39
<i>Malaria—</i>			Uries .. .. .. ..	6
Blood films .. .. ..	3	3	Pyorrhoea .. .. .. ..	10
<i>General bacteriology</i> .. .. ..	1,136	1,354		
<i>Chemical and general</i> .. .. ..	837	986	<b>Total</b> .. .. .. ..	<b>63</b>
<i>Vaccines</i> .. .. ..	63	33		
<i>Tumours and tissues</i> .. .. ..	192	160		
<b>Totals</b> .. .. ..	<b>25,501</b>	<b>22,378</b>		
			<b>1937.</b>	
			<b>TUMOURS AND TISSUES.</b>	
			<i>Non-malignant—</i>	
Uries .. .. ..	251		Simple inflammatory .. .. .. ..	25
Throat Swabs .. .. ..	15		Fibroma .. .. .. ..	4
Nasal Swabs .. .. ..	2		Fibro-adenoma .. .. .. ..	12
Vaginal .. .. ..	2		Cyst .. .. .. ..	5
Pus .. .. ..	17		Adenoma .. .. .. ..	4
Cerebro-spinal fluids .. .. ..	16		Fibrosis .. .. .. ..	14
Faeces .. .. ..	15		Normal tissue .. .. .. ..	8
Bloods .. .. ..	7		Polypus .. .. .. ..	3
Pleural fluids .. .. ..	11		Fibro-cystic .. .. .. ..	17
Synovial fluids .. .. ..	3		Wart .. .. .. ..	2
Teeth .. .. ..	1		Myoma .. .. .. ..	5
Cyst fluids .. .. ..	2		Degenerated tissue .. .. .. ..	4
Smears .. .. ..	6		Products of conception .. .. .. ..	6
Oysters .. .. ..	1		Myxoma .. .. .. ..	2
Potted meat .. .. ..	2		Tuberculosis .. .. .. ..	1
Bowel (horse) .. .. ..	1		Lipoma .. .. .. ..	2
Swabs (?) Vincent's angina .. .. ..	37		Ulcer .. .. .. ..	1
Tissue (?) tetanus .. .. ..	1		Papilloma .. .. .. ..	4
Smears (?) trichomonas .. .. ..	11		Exostosis .. .. .. ..	2
Hairs (?) ringworm .. .. ..	1		Chondroma .. .. .. ..	1
Bloods—B. Abortus agglutination .. .. ..	2		Cast .. .. .. ..	1
Bloods—Hydatid complement fixation .. .. ..	8		Angioma .. .. .. ..	6
Waters .. .. ..	582			
Milks .. .. ..	31		<i>Malignant—</i>	
Butter .. .. ..	4		Carcinoma .. .. .. ..	10
Sewage effluents .. .. ..	97		Adeno-carcinoma .. .. .. ..	12
Faeces for parasites .. .. ..	10		Squamous carcinoma .. .. .. ..	7
<b>Total</b> .. .. ..	<b>1,136</b>		Seirrus carcinoma .. .. .. ..	1

## ANIMAL TISSUES.

Hypernephroma (pig)	..	..	..	1
Caseation (ox)	..	..	..	1
Colloid goitre (ox)	..	..	..	1
Total	..	..	..	192
Grand Total	..	..	..	25,501

1938.

	Positive.	Incom- plete.	Nega- tive.	Total.
<i>Syphilis and Gonorrhoea—</i>				
Wassermann reactions	404	80	3,805	4,289
Smears for Sp. pallida	..	..	14	14
Smears for gonococci	1,164	..	4,996	6,160
Uries for gonococci	..	..	19	19
Complement fixation (gonor- rhoea)	..	147	15	822
				984
<i>Diphtheria—</i>				
Swabs (throat and nasal)	505	..	6,270	6,775
Swabs (virulence test)	..	..	1	1
<i>Tuberculosis—</i>				
Sputa	109	..	762	871
Pleural fluids	..	..	3	3
Pus	..	..	3	3
Uries	..	..	17	17
Faeces	..	..	2	2
Stomach residues	..	..	3	3
Milks	..	..	10	10
Cerebro spinal fluids	..	..	1	1
Guinea pig inoculations	..	5	..	49
				54
<i>Typhoid Fever, including Para- typhoids—</i>				
Bloods for agglutination	39	..	176	215
Faeces	7	..	41	48
Uries	6	..	29	35
Bloods for culture	..	..	2	2
<i>Brill's Disease—</i>				
Well Felix reactions	56	..	161	217
<i>Leprosy—</i>				
Smears (nasal and skin)	36	..	83	119
<i>Malaria—</i>				
Blood films	..	..	3	3

1938.

## GENERAL BACTERIOLOGY.

Uries	..	..	..	..	327
Throat swabs	..	..	..	..	25
Nasal swabs	..	..	..	..	2
Ear swabs	..	..	..	..	4
Vaginal swab	..	..	..	..	1
Rectal swabs	..	..	..	..	1
Pus	..	..	..	..	24
Cerebro-spinal fluids	..	..	..	..	19
Faeces	..	..	..	..	20
Bloods	..	..	..	..	9
Pleural fluids	..	..	..	..	10
Synovial fluids	..	..	..	..	3
Smears	..	..	..	..	7
Stomach	..	..	..	..	1
Liver	..	..	..	..	1
Gall bladder	..	..	..	..	1
Teeth	..	..	..	..	1
Sputum	..	..	..	..	1
Swabs (?) Vincent's Angina	..	..	..	44	
Smears (?) trichomonas	..	..	..	10	
Bloods—B. Abortus agglutination	..	..	..	18	
Bloods—Hydatid complement fixation	..	..	..	26	
Ginger beer	..	..	..	..	1
Waters	..	..	..	..	701
Milks	..	..	..	..	42
Sewage effluents	..	..	..	..	43
Faeces for parasites	..	..	..	..	12
Total	..	..	..	..	1,354

1938.

## CHEMICAL AND GENERAL.

Uries for microscopic examination	..	..	..	332
Cerebro-spinal fluids for microscopic examinations	..	..	..	51
For urea	..	..	..	3
For sugar	..	..	..	4
For protein	..	..	..	41
For chlorides	..	..	..	15
Uries for sugar	..	..	..	4
Uries for urea	..	..	..	203
Bloods for urea	..	..	..	129
Bloods for sugar	..	..	..	50
Bloods for Van den Bergh	..	..	..	8
Bloods for coagulation rate	..	..	..	5
Bloods for count	..	..	..	37
Blood films (differential count)	..	..	..	28
Blood films (? lead poisoning)	..	..	..	4
Faeces for occult blood	..	..	..	34
Test meals	..	..	..	5
Pregnancy tests	..	..	..	4
Disinfectants for carbolic co-efficient	..	..	..	3
Medico-legal examinations	..	..	..	26
Total	..	..	..	986

## VACCINES.

Respiratory tract	..	..	..	6
Pyogenic infections	..	..	..	24
Pyorrhoea	..	..	..	3
Total	..	..	..	33

## TUMOURS AND TISSUES.

<i>Non-malignant—</i>				
Simple inflammatory	..	..	..	26
Fibroma	..	..	..	3
Fibro-adenoma	..	..	..	11
Cyst	..	..	..	1
Adenoma	..	..	..	8
Fibrosis	..	..	..	9
Normal tissue	..	..	..	11
Polypus	..	..	..	7
Fibro-cystic	..	..	..	11
Wart	..	..	..	3
Granulation tissue	..	..	..	1
Myoma	..	..	..	3
Degenerated tissue	..	..	..	2
Products of conception	..	..	..	4
Myxoma	..	..	..	1
Tuberculosis	..	..	..	1
Lipoma	..	..	..	1
Angioma	..	..	..	2
Ulcer	..	..	..	1
Papilloma	..	..	..	3
Exostosis	..	..	..	1
Chondroma	..	..	..	1
<i>Malignant—</i>				
Carcinoma	..	..	..	5
Adeno-carcinoma	..	..	..	20
Squamous carcinoma	..	..	..	9
Rodent ulcer	..	..	..	5
Sarcoma spindle celled	..	..	..	1
Sarcoma round celled	..	..	..	3
Sarcoma mixed celled	..	..	..	2
Sarcoma giant celled	..	..	..	1
Sarcoma melanotic	..	..	..	2
Hodgkins disease	..	..	..	1
Total	..	..	..	160
Grand Total	..	..	..	22,378

Food samples submitted to Analyst under the Food and Drug Regulations for the year ended 31st December, 1937.

Milk	..	..	..	..	..	9
Jam	..	..	..	..	..	7
Mince meat	..	..	..	..	..	6
Sausages	..	..	..	..	..	4
Salt	..	..	..	..	..	1
Tripe	..	..	..	..	..	4
Oysters	..	..	..	..	..	1
Vinegar	..	..	..	..	..	5
Olive oil	..	..	..	..	..	4
Bread	..	..	..	..	..	14
						—
						55
						—

Ten samples failed to comply with the Regulations.

Food samples submitted to Analyst under the Food and Drug Regulations for the year ended the 31st December, 1938.

Apricots (canned)	..	..	..	..	..	1
Bread	..	..	..	..	..	2
Cod fillets	..	..	..	..	..	2
Dust (for arsenic content)	..	..	..	..	..	3
Milk	..	..	..	..	..	1
Peas (canned)	..	..	..	..	..	5
Resin mixture	..	..	..	..	..	1
Water	..	..	..	..	..	7
Wine	..	..	..	..	..	5
						—
Total	..	..	..	..	..	27
						—

Nineteen samples failed to comply with the Regulations.

During the year ended 31st December, 1937, the following items presented at the Port of Fremantle for admission to this State were rejected as unfit for consumption:—

Figs	..	..	..	..	..	24 lbs.
Fish	..	..	..	..	..	940 lbs.
						—

Total

.. .. .. .. .. 964 lbs.

During the year ended 31st December, 1938, the following items presented at the Port of Fremantle for admission to this State were rejected as unfit for consumption:—

Bacon	..	..	..	..	..	5,942 lbs.
Frozen fish	..	..	..	..	..	10,920 lbs.
Frozen pork	..	..	..	..	..	100 lbs.
						—

16,962 lbs.

—

Plans and Specifications of Septic Tanks Examined and Approved for the year ended 31st December, 1937.

Dwellings	..	..	..	..	..	778
Flats	..	..	..	..	..	5

Gardens	..	..	..	..	..	2
Garages	..	..	..	..	..	2
Shops	..	..	..	..	..	11
Churches	..	..	..	..	..	4
Schools	..	..	..	..	..	3
Public Conveniences	..	..	..	..	..	9
Stable	..	..	..	..	..	1
Offices	..	..	..	..	..	10
Hotels	..	..	..	..	..	15
Tea Rooms	..	..	..	..	..	2
Hospitals	..	..	..	..	..	8
Mining Lease	..	..	..	..	..	1
Factories	..	..	..	..	..	3
Halls	..	..	..	..	..	5
Colleges	..	..	..	..	..	4
Hangar	..	..	..	..	..	1
Clinic	..	..	..	..	..	1
Clubs	..	..	..	..	..	4
Quarantine Station	..	..	..	..	..	3
Crematorium	..	..	..	..	..	1
Broadcasting Station	..	..	..	..	..	1
Theatres	..	..	..	..	..	2
Recreation Reserves	..	..	..	..	..	3
						—
						879

Plans and Specifications of Septic Tanks Examined and Approved for year ended 31st December, 1938.

Dwellings	..	..	..	..	..	830
Shops	..	..	..	..	..	10
Convents	..	..	..	..	..	3
Public Halls	..	..	..	..	..	2
Farms	..	..	..	..	..	5
Banks	..	..	..	..	..	5
Tennis Clubs	..	..	..	..	..	3
Hotels	..	..	..	..	..	6
Guest Houses	..	..	..	..	..	2
Flats	..	..	..	..	..	3
Military Stores	..	..	..	..	..	2
Oil Store	..	..	..	..	..	1
Boarding Houses	..	..	..	..	..	2
Clubs	..	..	..	..	..	5
Schools	..	..	..	..	..	4
Public Conveniences	..	..	..	..	..	3
Offices	..	..	..	..	..	3
Dormitory	..	..	..	..	..	1
Dressing Room	..	..	..	..	..	1
Drill Hall	..	..	..	..	..	1
Workshop	..	..	..	..	..	1
Factories	..	..	..	..	..	6
Saleyards	..	..	..	..	..	2
Hospitals	..	..	..	..	..	4
Fire Stations	..	..	..	..	..	2
						—
						907

## MEAT INSPECTION.

Return of animals slaughtered and condemned for  
year ended 31st December, 1937.

*Animals slaughtered.*

Cattle	...	...	...	...	42,592
Calves	...	...	...	...	2,568
Sheep	...	...	...	...	480,084
Pigs	...	...	...	...	75,387

## CONDEMNATIONS.

Pathological Condition.	Carcases Condemned.	Part Carcasses Condemned.	Organs Condemned.
Actinomycosis	2	135	174
Actinobacillosis	...	...	34
Abscess	1	106	388
Angioma	...	...	56
Advanced Pregnancy	6	...	...
Cirrhosis	...	...	185
Congestion	...	...	50
Emaciation	614	...	...
Erysipelas	9	...	...
Fatty Infiltration	...	...	830
Gangrene	55	18	4
Hydatids	...	...	13,349
Hydraemia	8	...	...
Hydronephrosis	...	...	3,779
Icterus	32	...	...
Immaturity	7	...	...
Lymphadenitis	12	24	31,116 (sheep)
Moribund	37	...	...
Melanosis	...	...	621
Necrosis	...	...	8,715
Nephritis	...	...	99
Pleurisy	12	...	...
Pleuro-Pneumonia	6	...	81 (lungs)
Peritonitis	22	...	...
Pyaemia	18	...	...
Pericarditis	...	...	301
Piroplasmosis	35	...	...
Pyrexia	10	...	...
Renal Calculi	...	...	5
Swine Plague	15	...	...
Sepsis	50	...	...
Septic Pneumonia	11	...	...
Septic Metritis	1	...	...
Traumatism	103	124	2
Tuberculosis	336	881	553
Uraemia	4	...	...
Miscellaneous	18	13	230
<b>Totals</b>	<b>1,424</b>	<b>1,301</b>	<b>60,572</b>

*Animals Slaughtered at Private Slaughter Yards where Meat Inspection and Branding Regulations are in operation, for the year ended 31st December, 1937.*

Place,	Cattle,	Calves.	Sheep,	Pigs.
Albany	875	180	6,973	732
Bunbury	1,757	441	9,957	1,962
Busselton	650	10	3,509	387
Bridgetown	...	...	...	...
Collie	1,630	72	8,595	1,083
Geraldton	1,323	236	12,269	1,407
Kalgoorlie	16	...	689	30
Katanning	659	105	4,476	378
Narrogin	726	50	5,278	404
Merredin (3 months' kill)	266	26	2,126	145
Northam	1,163	217	9,895	1,129
York	...	...	...	...
Wiluna	952	20	8,340	1,232
Meat Markets, Fremantle	633 $\frac{1}{4}$	2,800	1,266	1,329
West Perth Markets	1,872	18,081	1,314	3,786
<b>Total</b>	<b>12,522<math>\frac{1}{4}</math></b>	<b>22,238</b>	<b>74,687</b>	<b>14,004</b>

## LEGAL PROCEEDINGS TAKEN BY INSPECTION BRANCH.

1937.

Offence.	Complaints.	Convictions.	Withdrawn.	Dismissed.	Imprisonment.	Detention Gaol Hospital.	Fine and Costs.
Health Act ... ...	25	23	2	...	1	1	£ 86 16 4
Bread Act ... ...	9	9	...	...	...	...	48 12 0
Food and Drug Regulation	8	8	...	...	...	...	2 15 0
Dairy By-laws ... ...	4	3	1	...	...	...	13 18 6
Meat Branding Regulations	3	3	...	...	...	...	4 6 0
							£156 7 10

## MEAT INSPECTION.

Return of animals slaughtered and condemned for the year ended 31st December, 1938.

*Animals slaughtered.*

Cattle ... ..	...	...	...	41,524
Calves ... ..	...	...	...	2,268
Sheep ... ..	...	...	...	470,698
Pigs ... ..	...	...	...	67,424

## CONDEMNATIONS.

Pathological Condition.	Carcasses Condemned.	Part Carcasses Condemned.	Organs Condemned.
Actinomycosis ... ...	...	136	162
Actinobacillosis ... ...	...	11	37
Abscess ... ...	4	99	334
Angioma ... ...	...	...	72
Advanced Pregnancy ... ...	4	...	...
Cysticercus Ovis ... ...	2	...	...
Congestion ... ...	...	...	52
Cirrhosis ... ...	...	...	147
Emaciation ... ...	551	...	...
Erysipelas ... ...	7	...	...
Fatty Infiltration ... ...	...	...	771
Gangrene ... ...	42	26	...
Hydatids ... ...	2	...	11,912
Hydraemia ... ...	8	...	...
Hydronephrosis ... ...	...	...	4,874
Icterus ... ...	24	...	...
Immaturity ... ...	8	...	...
Lymphadenitis ... ...	8	13	30,649 (sheep)
Moribund ... ...	38	...	...
Melanosis ... ...	3	...	892
Necrosis ... ...	...	...	13,149
Nephritis ... ...	...	...	27
Pleurisy ... ...	4	2	...
Pleuro-Pneumonia ... ...	8	...	100 (lungs)
Peritonitis ... ...	7	...	...
Pericarditis ... ...	...	...	348
Piroplasmosis ... ...	25	...	...
Putrefaction ... ...	7	...	...
Pyrexia ... ...	2	...	...
Pyaemia ... ...	12	...	...
Red Water Fever ... ...	1	...	...
Renal Calculi ... ...	...	...	30
Swine Plague ... ...	7	...	...
Sepsis ... ...	20	...	...
Septic Pneumonia ... ...	9	...	...
Traumatism ... ...	71	101	...
Tuberculosis ... ...	346	697	813
Uraemia ... ...	2	...	...
Miscellaneous ... ...	31	13	56
<b>Totals</b> ... ...	<b>1,253</b>	<b>1,098</b>	<b>64,425</b>

*Animals Slaughtered at Private Slaughteryards where Meat Inspection and Branding Regulations are in operation, for the year ended 31st December, 1938.*

Place.	Cattle.	Calves.	Sheep.	Pigs.
Albany	866	262	9,265	853
Bunbury	1,702	341	10,156	1,546
Busselton	735	33	3,700	383
Bridgetown (Period from 1st September to 31st December)	207	4	1,353	116
Collie	1,543	97	7,951	707
Geraldton	1,575	266	13,745	1,189
Kalgoorlie	...	1 $\frac{3}{4}$	49	5
Katanning	643	66	4,415	253
Narrogin	692	37	5,336	324
Merredin	777	65	8,501	416
Northam	1,076	219	9,928	722
York (Period from 6th October to 31st December)	103	16	881	55
Wiluna	750	28	6,815	955
Meat Markets, Fremantle	599	2,644	1,579	404
West Perth Markets	1,473	15,725	1,358	1,687
<b>Total</b>	<b>12,741</b>	<b>19,804<math>\frac{3}{4}</math></b>	<b>85,032</b>	<b>9,615</b>

1938.

Offence.	Complaints.	Convictions.	Withdrawn.	Dismissed.	Fine and Costs.
Health Act	14	14	...	...	£ s. d. 60 2 4
Food and Drug Regulations	1	1	...	...	2 18 0
					£63 0 4

## MEAT INSPECTION.

(1) By departmental inspectors at metropolitan abattoirs:—

	1937.	1938.
Cattle	42,592	41,524
Calves	2,568	2,268
Sheep	480,084	470,698
Pigs	75,387	67,424

Condemnations from the above—

Carcasses condemned	1,424	1,253
Part carcasses condemned	1,301	1,098
Organs condemned	60,572	64,425

(2) By local inspectors at private abattoirs—

Place.	1937.				1938.			
	Cattle.	Calves.	Sheep.	Pigs.	Cattle.	Calves.	Sheep.	Pigs.
Albany	875	180	6,973	732	866	262	9,265	853
Bunbury	1,757	441	9,957	1,962	1,702	341	10,156	1,546
Busselton	650	10	3,509	387	735	33	3,700	383
Bridgetown (Period from 1st September to 31st December, 1938)	...	...	...	...	207	4	1,353	116
Collie	1,630	72	8,595	1,083	1,543	97	7,951	707
Geraldton	1,323	236	12,269	1,407	1,575	266	13,745	1,189
Kalgoorlie	16	...	689	30	...	1 $\frac{3}{4}$	49	5
Katanning	659	105	4,476	378	643	66	4,415	253
Narrogin	726	50	5,278	404	692	37	5,336	324
*Merredin	266	26	2,126	145	777	65	8,501	416
Northam	1,163	217	9,895	1,129	1,076	219	9,928	722
York (Period from 6th October, to 31st December, 1938)	...	...	...	...	103	16	881	55
Wiluna	952	20	8,340	1,232	750	28	6,815	955
Meat Markets, Fremantle	633 $\frac{1}{4}$	2,800	1,266	1,329	599	2,644	1,579	404
West Perth Markets	1,872	18,081	1,314	3,786	1,473	15,725	1,358	1,687
<b>Totals</b>	<b>12,522<math>\frac{1}{4}</math></b>	<b>22,238</b>	<b>74,687</b>	<b>14,004</b>	<b>12,741</b>	<b>19,804<math>\frac{3}{4}</math></b>	<b>85,032</b>	<b>9,615</b>

\*1937 figures for 3 months kill.

TABLE 1.—NOTIFICATIONS OF EACH TYPE OF INFECTIOUS DISEASE RECEIVED BY THE DEPARTMENT OF PUBLIC HEALTH FOR EACH MONTH OF THE YEAR ENDED 31ST DECEMBER, 1937.

Month.	Diphtheria.	Scarlet Fever.	Pulmonary Tuberculosis.	Typhoid.	Brill's Disease.	Puerperal Fever.	Leprosy.	Dysentery.	Infantile Paralysis.	Cerebro-Spinal Meningitis.	Malaria.	Lethargic Encephalitis.
January	103	20	21	9	2	1	1	1	1	1	1	1
February	96	23	20	4	3	2	2	2	1	1	1	1
March	100	43	20	8	10	3	3	3	1	1	1	1
April	117	63	31	6	4	5	5	5	1	1	1	1
May	125	68	19	3	4	4	4	4	1	1	1	1
June	126	72	9	5	1	1	1	1	1	1	1	1
July	112	75	19	1	1	1	1	1	1	1	1	1
August	78	72	20	6	1	3	3	3	1	1	1	1
September	58	51	15	2	2	1	1	1	1	1	1	1
October	51	43	20	5	5	4	4	4	1	1	1	1
November	85	47	19	2	5	4	4	4	1	1	1	1
December	115	50	26	5	4	4	4	4	1	1	1	1
Total	1,166	627	239	51	37	29	16	1	15	5	2	1

TABLE 2.—NOTIFICATIONS OF EACH TYPE OF INFECTIOUS DISEASE RECEIVED BY THE DEPARTMENT OF PUBLIC HEALTH FOR EACH WEEK OF THE YEAR ENDED 31ST DECEMBER, 1937.

Week.	Diphtheria.	Scarlet Fever.	Pulmonary Tuberculosis.	Typhoid.	Brill's Disease.	Puerperal Fever.	Leprosy.	Dysentery.	Infantile Paralysis.	Cerebro-Spinal Meningitis.	Malaria.	Lethargic Encephalitis.
First	32	5	7	6	1	1	1	1	1	1	1	1
Second	13	5	7	6	1	1	1	1	1	1	1	1
Third	28	3	7	6	1	1	1	1	1	1	1	1
Fourth	27	3	7	6	1	1	1	1	1	1	1	1
Fifth	29	4	7	6	1	1	1	1	1	1	1	1
Sixth	17	3	3	3	1	1	1	1	1	1	1	1
Seventh	26	10	6	6	1	1	1	1	1	1	1	1
Eighth	25	6	4	4	1	1	1	1	1	1	1	1
Ninth	21	12	3	3	1	1	1	1	1	1	1	1
Tenth	20	6	8	8	1	1	1	1	1	1	1	1
Eleventh	22	13	6	6	1	1	1	1	1	1	1	1
Twelfth	29	11	3	3	1	1	1	1	1	1	1	1
Thirteenth	23	8	3	3	1	1	1	1	1	1	1	1
Fourteenth	10	13	3	3	1	1	1	1	1	1	1	1
Fifteenth	24	7	6	6	1	1	1	1	1	1	1	1
Sixteenth	29	17	10	10	1	1	1	1	1	1	1	1
Seventeenth	35	19	9	9	1	1	1	1	1	1	1	1
Eighteenth	36	18	3	3	1	1	1	1	1	1	1	1
Nineteenth	30	17	3	3	1	1	1	1	1	1	1	1
Twentieth	30	16	8	8	1	1	1	1	1	1	1	1
Twenty-First	26	13	4	4	1	1	1	1	1	1	1	1
Twenty-Second	28	19	4	4	1	1	1	1	1	1	1	1
Twenty-Third	38	17	2	2	1	1	1	1	1	1	1	1
Twenty-Fourth	25	19	2	2	1	1	1	1	1	1	1	1
Twenty-Fifth	35	15	2	2	1	1	1	1	1	1	1	1
Twenty-Sixth	17	11	4	4	1	1	1	1	1	1	1	1
Twenty-Seventh	31	16	8	8	1	1	1	1	1	1	1	1
Twenty-Eighth	26	25	3	3	1	1	1	1	1	1	1	1
Twenty-Ninth	21	16	2	2	1	1	1	1	1	1	1	1
Thirtieth	21	12	2	2	1	1	1	1	1	1	1	1
Thirty-First	20	13	2	2	1	1	1	1	1	1	1	1
Thirty-Second	14	19	1	1	1	1	1	1	1	1	1	1
Thirty-Third	22	26	7	7	1	1	1	1	1	1	1	1
Thirty-Fourth	16	12	5	5	1	1	1	1	1	1	1	1
Thirty-Fifth	17	15	5	5	1	1	1	1	1	1	1	1
Thirty-Sixth	17	8	3	3	1	1	1	1	1	1	1	1
Thirty-Seventh	13	7	3	3	1	1	1	1	1	1	1	1
Thirty-Eighth	10	10	5	5	1	1	1	1	1	1	1	1
Thirty-Ninth	7	13	2	3	1	1	1	1	1	1	1	1
Fortieth	13	9	9	9	1	1	1	1	1	1	1	1
Forty-First	7	7	2	2	1	1	1	1	1	1	1	1
Forty-Second	11	10	6	6	1	1	1	1	1	1	1	1
Forty-Third	16	15	4	4	1	1	1	1	1	1	1	1
Forty-Fourth	15	5	8	8	1	1	1	1	1	1	1	1
Forty-Fifth	20	14	7	7	1	1	1	1	1	1	1	1
Forty-Sixth	16	7	2	1	1	1	1	1	1	1	1	1
Forty-Seventh	21	19	6	6	2	1	1	1	1	1	1	1
Forty-Eighth	25	8	5	3	3	1	1	1	1	1	1	1
Forty-Ninth	25	17	5	5	1	1	1	1	1	1	1	1
Fiftieth	36	11	13	13	1	1	1	1	1	1	1	1
Fifty-First	23	10	4	1	1	1	1	1	1	1	1	1
Fifty-Second	23	8	1	1	1	1	1	1	1	1	1	1
Total	1,166	627	239	51	37	29	16	1	15	5	2	1

TABLE 3.

AGE AND SEX DISTRIBUTION OF CASES OF PULMONARY TUBERCULOSIS NOTIFIED TO DEPARTMENT OF PUBLIC HEALTH FOR EACH MONTH OF THE YEAR ENDED 31ST DECEMBER, 1937.

Month.	Ages, in Years.																			
	0-1.		1-2.		2-3.		3-4.		4-5.		5-6.		6-7.		7-8.		8-9.		9-10.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.

## PULMONARY TUBERCULOSIS.

January ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
February ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
March ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April ...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
May ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
July ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1

## Ages, in Years—continued.

Month.	Ages, in Years—continued.								Age not notified.	M.	F.	Total.						
	15-20.		20-25.		25-30.		30-35.		35-40.		40-45.		45-50.		50 and over.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.

## PULMONARY TUBERCULOSIS—continued.

January ...	...	2	1	1	...	2	1	1	...	3	1	3	...	4	...	...	12	7	19		
February ...	1	1	...	...	3	...	1	...	1	1	1	1	...	8	...	2	...	18	2	20	
March ...	1	1	...	...	1	...	3	1	2	1	1	1	...	1	1	5	...	2	...	16	
April ...	3	1	...	2	2	1	...	3	3	1	2	2	...	2	1	7	2	...	19	12	
May ...	...	1	...	...	4	2	...	1	1	2	2	1	...	5	...	2	...	12	7	19	
June ...	...	...	...	...	...	...	1	1	2	1	1	1	...	2	...	...	...	6	3	9	
July ...	...	...	2	...	1	1	1	...	2	1	1	1	...	3	2	4	2	...	14	5	
August ...	1	...	...	2	1	...	2	1	2	1	1	2	1	4	2	1	...	14	6	20	
September ...	...	...	...	1	...	2	1	...	...	1	2	2	...	...	...	5	1	8	7	15	
October ...	...	...	1	1	...	2	1	...	3	3	1	1	...	3	1	7	...	17	5	22	
November ...	...	...	2	2	2	1	1	3	1	1	1	4	1	4	1	4	...	15	7	22	
December ...	...	...	2	1	...	2	4	2	...	1	1	3	...	8	2	...	...	17	9	26	
Totals ...	6	6	4	11	15	10	15	13	21	11	15	5	22	7	58	8	12	1	168	74	242

TABLE SHOWING THE INCIDENCE IN VARIOUS DISTRICTS OF EACH TYPE OF INFECTIOUS DISEASE FOR THE YEAR ENDED 31-12-37.

TABLE SHOWING THE INCIDENCE IN VARIOUS DISTRICTS OF EACH TYPE OF INFECTIOUS DISEASE FOR THE YEAR ENDED 31-12-37.—*continued.*

TABLE SHOWING THE INCIDENCE IN VARIOUS DISTRICTS OF EACH TYPE OF INFECTIOUS DISEASE FOR THE YEAR ENDED 31-12-37.—*continued.*

TABLE SHOWING THE INCIDENCE IN VARIOUS DISTRICTS OF EACH TYPE OF INFECTIOUS DISEASE FOR THE YEAR ENDED 31-12-37.—*continued.*

TABLE 1.—NOTIFICATIONS OF EACH TYPE OF INFECTIOUS DISEASE RECEIVED BY THE DEPARTMENT OF PUBLIC HEALTH FOR EACH MONTH OF THE YEAR ENDED 31ST DECEMBER, 1938.

Month.	Diphtheria.	Scarlet Fever.	Pulmonary Tuberculosis.	Typhoid.	Brill's Disease.	Dysentery.	Puerperal Fever.	Leprosy.	Infantile Paralysis.	Lethargic Encephalitis.
January ...	110	70	24	3	5	1	1	1	8	16
February ...	69	46	23	5	6	1	3	1	16	16
March ...	84	66	45	9	5	1	3	1	2	2
April ...	87	61	25	5	6	1	3	1	2	1
May ...	87	59	15	6	5	1	3	1	3	1
June ...	102	39	10	2	2	1	2	1	12	1
July ...	88	37	27	2	2	1	2	1	11	1
August ...	62	44	20	1	2	1	2	1	13	1
September ...	40	34	18	3	1	1	4	1	3	1
October ...	47	28	16	1	2	1	2	1	2	1
November ...	51	34	14	1	1	1	2	1	2	1
December ...	94	33	10	1	1	1	1	1	1	1
Total ...	921	551	247	37	38	4	29	45	47	1

TABLE 2.—NOTIFICATIONS OF EACH TYPE OF INFECTIOUS DISEASE RECEIVED BY THE DEPARTMENT OF PUBLIC HEALTH FOR EACH WEEK OF THE YEAR ENDED 31ST DECEMBER, 1938.

Week.	Diphtheria.	Scarlet Fever.	Pulmonary Tuberculosis.	Typhoid.	Brill's Disease.	Dysentery.	Puerperal Fever.	Leprosy.	Infantile Paralysis.	Lethargic Encephalitis.
First Week ...	32	25	7	1	1	1	1	1	1	1
Second ...	27	13	3	2	2	1	1	1	1	1
Third ...	27	13	6	1	1	1	1	1	1	1
Fourth ...	22	16	8	1	1	1	1	1	1	1
Fifth ...	21	9	1	2	1	1	1	1	1	1
Sixth ...	16	11	4	1	1	1	1	1	1	1
Seventh ...	16	10	9	1	1	1	1	1	1	1
Eighth ...	14	17	8	2	2	2	2	2	2	2
Ninth ...	20	14	6	1	1	1	2	1	1	1
Tenth ...	23	10	10	2	2	2	2	1	1	1
Eleventh ...	19	26	11	2	2	2	2	1	1	1
Twelfth ...	14	20	12	2	2	2	2	1	1	1
Thirteenth ...	22	10	9	2	2	2	2	1	1	1
Fourteenth ...	13	21	8	4	4	4	4	1	1	1
Fifteenth ...	24	7	3	1	1	1	1	1	1	1
Sixteenth ...	23	17	6	1	1	1	1	1	1	1
Seventeenth ...	22	14	6	1	1	1	1	1	1	1
Eighteenth ...	19	17	1	1	1	1	1	1	1	1
Nineteenth ...	26	14	2	1	1	1	1	1	1	1
Twentieth ...	21	3	6	1	1	1	1	1	1	1
Twenty-First	15	11	6	1	1	1	1	1	1	1
Twenty-Second	21	11	1	1	1	1	1	1	1	1
Twenty-Third	18	13	2	1	1	1	1	1	1	1
Twenty-Fourth	24	6	4	1	1	1	1	1	1	1
Twenty-Fifth	29	12	2	1	1	1	1	1	1	1
Twenty-Sixth	15	2	3	1	1	1	1	1	1	1
Twenty-Seventh	22	12	5	2	1	1	1	1	1	1
Twenty-Eighth	20	7	3	1	1	1	1	1	1	1
Twenty-Ninth	19	6	5	1	1	1	1	1	1	1
Thirtieth ...	20	8	12	2	1	1	1	1	1	1
Thirty-First ...	10	11	2	1	1	1	1	1	1	1
Thirty-Second	11	4	5	1	1	1	1	1	1	1
Thirty-Third	21	15	5	1	1	1	1	1	1	1
Thirty-Fourth	17	13	4	1	1	1	1	1	1	1
Thirty-Fifth	10	7	5	1	1	1	1	1	1	1
Thirty-Sixth	13	7	2	1	1	1	1	1	1	1
Thirty-Seventh	4	12	5	2	1	1	1	1	1	1
Thirty-Eighth	11	7	10	1	1	1	1	1	1	1
Thirty-Ninth	9	5	5	1	1	1	1	1	1	1
Fortieth ...	8	8	5	1	1	1	1	1	1	1
Forty-First ...	16	4	1	1	1	1	1	1	1	1
Forty-Second	13	2	4	1	1	1	1	1	1	1
Forty-Third ...	8	9	5	2	1	1	1	1	1	1
Forty-Fourth	12	6	3	1	1	1	1	1	1	1
Forty-Fifth ...	10	6	1	1	1	1	1	1	1	1
Forty-Sixth	8	8	3	1	1	1	1	1	1	1
Forty-Seventh	8	13	6	1	1	1	1	1	1	1
Forty-Eighth	22	8	3	2	1	1	1	1	1	1
Forty-Ninth	22	7	2	1	1	1	1	1	1	1
Fiftieth ...	19	6	2	1	1	1	1	1	1	1
Fifty-First ...	26	8	5	1	1	1	1	1	1	1
Fifty-Second	22	11	1	1	1	1	1	1	1	1
Total ...	921	551	247	37	38	4	29	45	47	1

TABLE 3.

AGE AND SEX DISTRIBUTION OF CASES OF PULMONARY TUBERCULOSIS NOTIFIED TO DEPARTMENT OF PUBLIC HEALTH FOR EACH MONTH OF THE YEAR ENDED 31ST DECEMBER, 1938.

Month.	Ages, in Years.																			
	0-1.		1-2.		2-3.		3-4.		4-5.		5-6.		6-7.		7-8.		8-9.		9-10.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.

## PULMONARY TUBERCULOSIS.

January ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
February ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
March ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
May ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
June ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
July ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
August ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	2

Ages, in Years—*contd.*

Month.	Ages, in Years— <i>contd.</i>										Age not notified.	M.	F.	Total.				
	15-20.		20-25.		25-30.		30-35.		35-40.		40-45.		45-50.		50 and over.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.

PULMONARY TUBERCULOSIS—*contd.*

January ...	2	...	1	1	...	1	...	1	2	1	...	1	...	7	5	1	14	10	24		
February ...	...	...	1	1	...	4	2	1	...	2	1	...	...	8	1	...	12	10	22		
March ...	1	4	1	3	2	3	2	3	3	1	...	2	4	...	11	4	1	25	20	45	
April ...	1	1	...	2	...	...	2	...	4	1	...	...	1	1	8	2	...	17	9	26	
May ...	...	1	...	2	...	...	...	2	1	...	...	1	1	...	6	...	...	9	6	15	
June ...	1	...	...	...	...	1	1	...	...	1	...	2	...	3	1	...	...	8	2	10	
July ...	...	3	...	1	2	1	3	...	2	1	2	...	2	...	5	2	2	18	9	27	
August ...	...	...	...	...	3	...	...	...	1	...	1	...	3	...	7	1	...	15	1	16	
September ...	...	...	...	...	1	1	2	2	1	1	1	...	1	...	11	2	...	16	6	22	
October ...	...	...	1	...	2	2	...	...	1	...	3	...	1	...	6	...	...	14	2	16	
November ...	...	...	...	1	...	1	...	1	1	1	...	1	2	5	...	...	1	7	7	14	
December ...	...	...	...	...	...	...	...	1	1	...	...	...	...	8	...	...	9	1	10		
Totals ...	5	9	4	11	10	14	12	10	16	9	9	3	17	3	85	18	4	4	164	83	247

TABLE SHOWING THE INCIDENCE IN VARIOUS DISTRICTS OF EACH TYPE OF INFECTIOUS DISEASE FOR THE YEAR ENDED 31st DECEMBER, 1938.

TABLE SHOWING THE INCIDENCE IN VARIOUS DISTRICTS OF EACH TYPE OF INFECTIOUS DISEASE FOR THE YEAR ENDED 31st DECEMBER, 1938—(continued).

